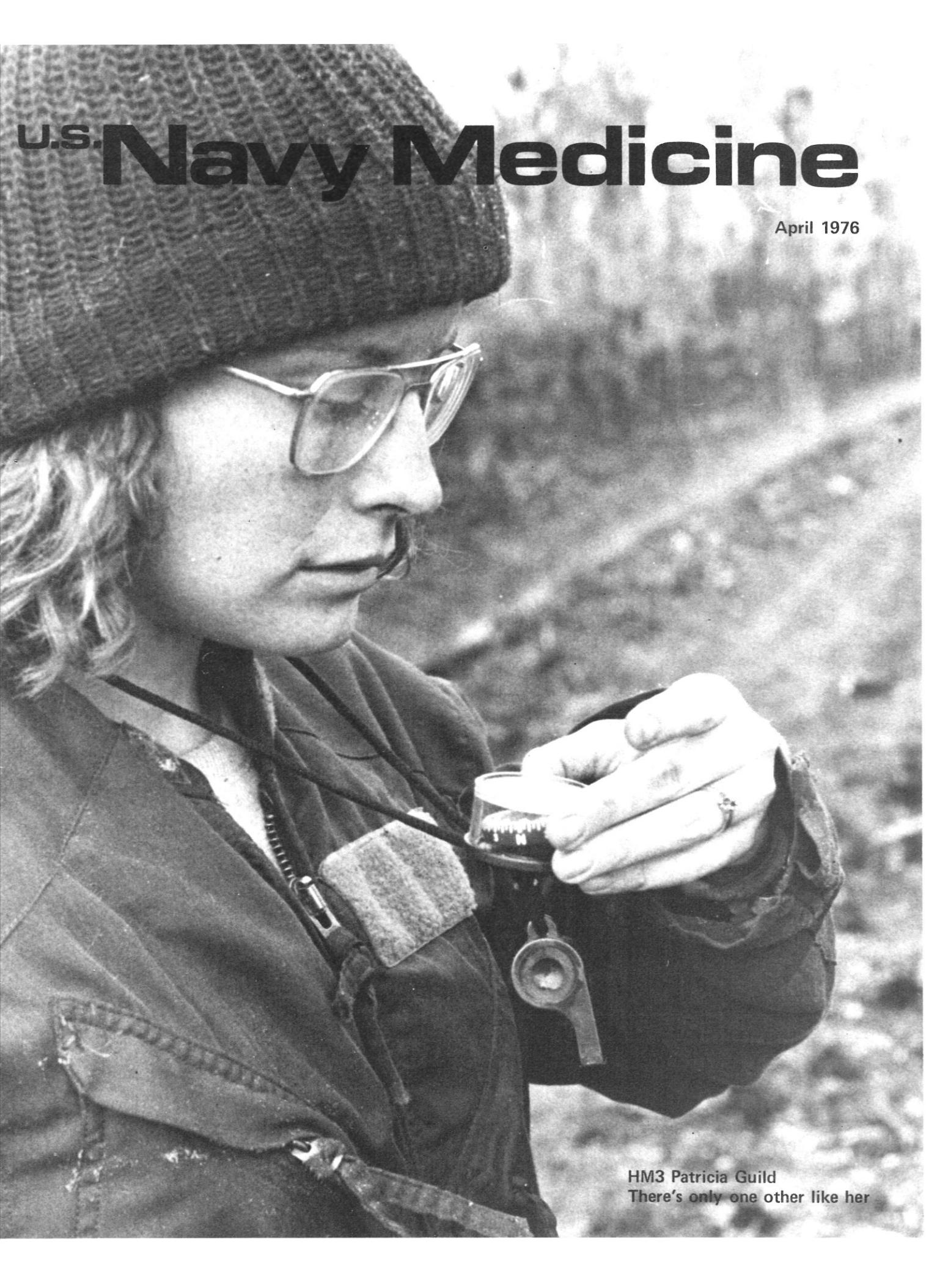


U.S. Navy Medicine

April 1976



HM3 Patricia Guild
There's only one other like her

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U.S. NAVY MEDICINE

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COVER: With whistle and compass in hand, HM3 Patricia Guild pauses to get her bearings at the Cherry Point Survival, Escape, Resistance and Evasion School. HM3 Guild is one of only two women to complete this training. More about SERE on page 12. (Photo by SSGT Peggy Cauley.)

From the Chief

"You have trusted yourselves . . ."

On 3 March, the Navy Medical Corps observed the 105th anniversary of its legislative birth. Speaking at the birthday celebration held at National Naval Medical Center, Bethesda, VADM Donald L. Custis expressed his pride in the character, commitment, and accomplishment of Medical Corps members:

Navy Medicine is composed of five fine corps. Without detracting from the merits of any one of them, I salute tonight you of the Navy Medical Corps.

Whether present in this room or on distant stations, I express to you my own unabashed, fierce pride in who you are, what you are, and what you do. I concede to no one a more valid point of vantage from which to observe your accomplishment during these years of adversity.

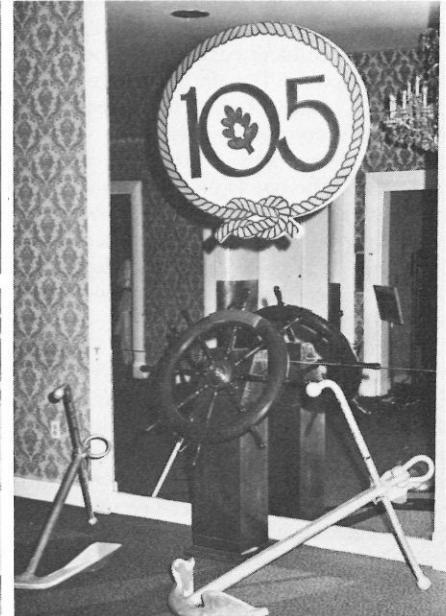
You are indeed service oriented, giving of yourself, self-sacrificing whenever need be, to your patients, to the Navy-Marine team, and to your country. You have responded magnificently to every challenge to do more and more with less and less. You have been innovative and committed, especially in cost containment and in filling the void in primary care. You have collectively kept your head and trusted yourselves when many others doubted you, and you have made allowances for their doubting, too. You have genuinely sought "not so much to be understood, but to understand"—when there is so much not easily understandable.

While so many of your fellow citizens are edgy with doubt and cynicism, you have kept your perspective and your faith in the heritage, strength, and resilience of this great nation.

Happy Birthday!



Surgeon General of the Navy



Scenes from the Medical Corps 105th Anniversary celebration, March 1976, National Naval Medical Center. Below: VADM Custis cuts anniversary cake with LT Warren Broughton (MC) and Mrs. Broughton.



Department Rounds

BUMED

The Children's Advocate

• A young sailor brings his 13-month-old son to a naval dispensary with a broken leg and two skull fractures. The child is rushed to a nearby naval hospital. The father's explanation: he'd been watching television and the child's crying annoyed him, so he hit the baby and "dropped it by accident." The boy is placed with foster parents, then returned to his father. Some time later, the father reappears at the same dispensary: this time his son has a serious head injury. A few days later, the child dies.

• A day care worker notices that a six-month-old girl looks weak and thin. She reports this to the police, who bring the child to a naval pediatric clinic. The pediatrician's description: "Weight, 9 lbs., 8 oz. Emaciated, prominent rib cage, cut below left eye, bruise on forehead, weak, evidence of scraping." X-rays show three prior rib fractures and an old leg fracture. The child is sent to a receiving home; her parents join "Parents Anonymous," a self-help group.

These incidents are typical of cases being reported from medical facilities nationwide. Through the haze of statistics and reports, one fact is clear: child abuse and neglect are serious problems, in the military as well as in civilian life. Recently-released Department of Health, Education and Welfare statistics indicate that each year more than one million children are victims of physical abuse and neglect. At least 2,000 children die annually from associated circumstances.

To expose and remedy the problem among Navy and Marine Corps families, BUMED has just launched a four-phase Child Advocacy Program. The implementing directive is BUMED Instruction 6320.53 of 4 February 1976.

Phases One and Two involve creating administrative bodies to run the program. The Surgeon General will appoint a central child advocacy committee to oversee the program, maintain a central case registry, analyze data, and recommend new approaches. Each naval medical facility that treats a substantial

number of children will have a similar committee. At smaller naval medical facilities, a single child advocacy representative will be the command's contact for child abuse matters. These "advocates" will notify the naval regional medical center's committee of any child abuse cases they see, and the committee will investigate and take action to protect the child's welfare. Case reports will eventually enter BUMED's central registry, where the information will be used to allocate resources and pinpoint program weaknesses.



Action to protect the child

In Phases Three and Four, social workers and clerks will be assigned where needed. Plans now call for a psychiatric social worker and a clerk at each naval regional medical center, and at each isolated medical facility where large numbers of children are seen.

How much child abuse is there among Navy and Marine Corps personnel? Two years ago, all commands were instructed to report to BUMED all cases of child abuse or neglect. The result: 327 cases reported in CY74 and 260 in CY75. Of these cases, 410 were sufficiently documented to analyze. Most (68%) were cases of physical abuse, 22% were neglect, 5% were sexual assaults, and 3% resulted in death. Mothers and fathers were almost equally responsible: 37% of the abusers were

mothers, 31% fathers. Fourteen percent were others, such as babysitters and neighbors. Most of the children (73%) were under the age of five.

Most child abuse takes place between 5 p.m. and 7 p.m. on weekdays and between 10 p.m. Friday and 4 a.m. Sunday. It's not hard to see why: A weary father drags home from a discouraging day at work. His harried wife is trying to make supper and quiet the kids. Dad wants her to pay some attention to him—the last thing he needs is the sound of children screaming and fighting. It's a familiar situation, fraught with hazards. And those weekend hours are also the time when many adults wipe out the pressures and tensions of the week with a few drinks—maybe a few too many.

Children are perhaps the most disenfranchised of all "minorities." Since they cannot fight for their own rights, they needed—and now have—legal help. The 1974 Child Abuse Prevention and Treatment Act directed the Department of Health, Education and Welfare to set up a reporting center and clearinghouse for child abuse information; the HEW unit also awards grants for research and prototype treatment projects.

In the military, early efforts centered around a triservice child advocacy task force appointed to design a uniform program for the three services. "We couldn't do it," says LCDR Loren Acord (MSC), project officer of BUMED's Child Advocacy Program. "For one thing, the Navy doesn't have social workers on active duty, like the Army and Air Force do. Also, the different services assign responsibility for the child abuse program to different departments: in the Air Force and Navy, child abuse problems come under the medical department; in the Army, they're handled by the personnel department. So we had to come up with our own program."

Under the Navy's new Child Advocacy Program, commands are encouraged to:

- Educate health care personnel, who don't always recognize child abuse when they see it. The National Naval Medical Center offers child abuse lectures to groups who work directly with patients: physicians, Medical Ser-

vice Corps officers, nurses, physician's assistants. The lecturers discuss actual cases, graphically illustrated with photos. "Recognizing child abuse is often a matter of experience," explains LCDR Walter Landen (JAGC) of the NNM Legal Services Office, "a feeling that there's more to a case than meets the eye. We ask our health professionals to get a pediatrician involved to help spot possible child abuse." Physicians should also examine the entire medical record of a suspected abused child, because frequently a pattern can be found that substantiates a history of child abuse, LCDR Landen says.

- Develop simple, confidential procedures for reporting cases to the commanding officer, who will forward these reports to the local civilian child welfare agency.
- Help families who neglect or abuse their children to overcome their problems. Social workers can teach a young mother how to handle children with minimum disruption to family life. Volunteer homemakers can watch the kids while their mother makes dinner, and can teach her how to handle household tasks more efficiently. Day care centers can relieve the pressures on the mother's time. Sometimes a simple change, such as rearranging sleeping spaces, works well.
- Develop follow-up procedures to safeguard the child's health and safety. When the family changes stations, the case summary should be sent to the new medical facility.
- Give regular health evaluations to all children under the age of five. Such a program has been proposed by the American Academy of Pediatrics and accepted by the Department of Health, Education and Welfare.
- Work with local civilian and other military agencies. This cooperation can prevent abusers, particularly those who live off-base, from eluding detection by taking their child from hospital to hospital.

What should you, as a Navy health care professional, do if you suspect child abuse? First, document all the evidence carefully. The attending physician should describe location of bruises, contusions, fractures, or other injuries, and get a detailed account of how the injuries occurred. Then consult a pediatrician or a social worker to verify your suspicions. Finally, report the case to your command's child advocacy representative.

Personnel

Four New Flags

Three medical officers—two active-duty, one Reserve—and a dental officer have been selected for promotion to rear admiral.

RADM-selectee **J. William Cox** (MC), commanding officer of the Health Sciences Education and Training Command, Bethesda, Maryland, since 1973, was born 31 August 1928 in St. Louis, Missouri. He received his M.D. in 1952 and Ph.D. in physiology in 1953 from St. Louis University. He joined the Navy Medical Corps in 1954, serving his internship and residency in internal medicine at Naval Regional Medical Center San Diego, California, where he remained as head of the cardiopulmonary laboratory and supervisor of the medical section.

From 1961 to 1963 Dr. Cox was director of clinics and chief of medicine at Naval Hospital Subic Bay, Republic of the Philippines. He then joined the staff of Naval Hospital Philadelphia as head of the Cardiovascular, Pulmonary, and Communicable Disease Branch, and later was named chief of medicine and director of research. He joined BUMED in 1973, where he served for three years as assistant head and then head of the Training and Clinical Services Branch, Professional Division, before assuming his present command.

Since 1971 Dr. Cox has also been BUMED's special assistant for Medical Department education and training, and special assistant for medical education and training to the Office of the Chief of Naval Operations, Director of Naval Education and Training.

Dr. Cox is a diplomate of the American Board of Internal Medicine, and a Fellow of the American College of

Physicians, the American College of Chest Physicians, and the Philadelphia College of Physicians. He serves as an alternate member of the National Library of Medicine Board of Regents, and is treasurer and a trustee of the American College of Cardiology. His professional memberships include the Association of Military Surgeons of the United States, the National Medical Audiovisual Center/Learning Resources Branch Advisory Committee (Public Health Service), the National Board of Medical Examiners, and the American Heart Association. He serves as alternate Navy delegate to the American Medical Association House of Delegates, and chairs the AMA section council on federal and military medicine.

CAPT Cox held faculty appointments at Jefferson Medical College, Philadelphia, as associate in medicine (1963-64), assistant professor of medicine (1964-67), and associate professor of medicine (1968-73). He holds two National Defense Medals (one with bronze star), the Navy Commendation Medal, and the Meritorious Service Medal.

RADM-selectee **Almon C. Wilson** (MC), commanding officer of Naval Regional Medical Center Great Lakes, Illinois, was born 13 July 1924 in Hudson Falls, New York, and first entered the Navy in 1943 in the V-12 program. Commissioned an ensign in the Naval Reserve in 1944, he served aboard the *USS Liddle* (APD-60) in the Western Pacific.

After his release to inactive duty, Dr. Wilson earned a B.A. degree from Union College, Schenectady, New York, and an M.D. in 1952 from Albany (N.Y.) Medical College. He returned to active duty that year to intern at Naval Hospital Bremerton, Washington, after which he served as squadron medical officer of Mine Squadron 3.



Admiral Selectees
(From left) CAPTs Cox, Wilson, Voth, Farrell

In 1954 he was again released from active duty, and began 5½ years of surgical training at the Veterans Administration Hospital in Salt Lake City. He returned to active duty in 1959 as chief of surgery at Naval Hospital Subic Bay, Republic of the Philippines. Following assignments on the surgical staff of Naval Hospital San Diego, California, and Naval Hospital Chelsea, Massachusetts, Dr. Wilson commanded the Third Medical Battalion, Third Marine Division, in Vietnam from 1965 to 1966. He was then named chief of surgery at Naval Hospital Yokosuka, Japan.

After training at the Naval War College, Newport, Rhode Island, Dr. Wilson served on the staff of the Commander in Chief, U.S. Naval Forces, Europe for two years before coming to BUMED in 1971 as deputy director and then director of the Planning Division. While at BUMED, Dr. Wilson also served as medical adviser to the Deputy Chief of Naval Operations for Logistics, and as medical adviser and personal physician to the Chairman of the Joint Chiefs of Staff. He assumed command of NRMC Great Lakes in 1974.

A Diplomate of the American Board of General Surgery, a Fellow of the American College of Surgeons, and a member of the American Medical Association and the Association of Military Surgeons of the United States, Dr. Wilson earned a master's degree in international affairs from George Washington University in 1969. He was awarded the Legion of Merit with "V," and also holds the Meritorious Service Medal with gold star, the Joint Service Commendation Medal, a Presidential Unit Citation, Navy Unit Commendation, Naval Reserve Medal, and numerous other campaign and service medals from World War II, Korea, and Vietnam.

Naval Reserve RADM-selectee **Harold M. Voth** (MC), a native of Newton, Kansas, was born 29 December 1922, and received his B.S. degree from Washburn University, Topeka, Kansas, in 1943. He then enlisted in the Navy as an apprentice seaman. Released to the inactive Reserve in 1945, he earned his M.D. from the University of Kansas in 1947, and interned at the San Diego County General Hospital. He served his residency in psychiatry at Topeka's Veterans Administration Hospital.

Dr. Voth again served on active duty

in the Navy from 1950 to 1952. Since then he has participated in the Ready Reserve.

In 1957, after five years as a staff member at the VA Hospital, Dr. Voth began his long affiliation with the Menninger Foundation. Currently, he is on the faculty of the Menninger School of Psychiatry (since 1955) and the Topeka Institute for Psychoanalysis, staff psychiatrist and psychoanalyst for the Menninger Foundation (since 1957), consultant (since 1957) and associate chief of psychiatry for education (since 1975) at the Topeka VA Hospital, consultant in psychiatry to the Navy Surgeon General (since 1975), and consultant in psychiatry at Stormont-Vail Hospital, Topeka (since 1972).

A Diplomate of the American Board for Psychiatry, Dr. Voth trained at the Menninger School of Psychiatry (1952) and the Topeka Institute for Psychoanalysis (1962). He was certified as a psychoanalyst by the American Psychoanalytic Association in 1965. He is a member of the International Psychoanalytic Association, the New York Academy of Sciences, the Association for the Advancement of Psychotherapy, the American Medical Association, and a number of other professional groups. A Fellow of the American Psychiatric Association and the American Association for the Advancement of Science, he serves as an examiner in basic and clinical psychiatry for the American Board of Psychiatry and Neurology.

Dr. Voth is currently affiliated with General 1017 IRU at the Naval Reserve Training Center, Topeka. He holds the Navy Commendation Medal, and received the William C. Menninger Award as teacher of the year from the 1970 graduating class of the Menninger School of Psychiatry.

RADM-selectee **Paul E. Farrell** (DC) is commanding officer and director of clinical services at Naval Regional Dental Center, Norfolk, Virginia. Born in Upper Darby, Pennsylvania, on 15 November 1926, he enlisted in the Naval Reserve in 1944, serving as hospital corpsman, dental technician, and pharmacist mate third class. Following his discharge, he completed pre-dental studies at LaSalle College, Philadelphia, and graduated from the University of Pennsylvania Dental School, Philadelphia, in 1951. He began his internship at Naval Dental School Bethesda,

Maryland, completing the last six months at Naval Hospital Oakland, California.

Dr. Farrell was commissioned an ensign in the Naval Reserve while in dental school, and was on active duty during his senior year in the Navy Senior Dental Student Program. Subsequent tours included duty at the Naval Gun Factory, Washington, D.C. (during which he accepted a regular Navy appointment), aboard the *USS Howard W. Gilmore*, at the U.S. Naval Academy, Naval Air Station Port Lyautey, Morocco, and on the staff of the Naval Dental School in Bethesda. From 1968 to 1969 he served aboard the *USS New Jersey* (BB-62) in Vietnam. He returned to Washington, D.C., as clinic supervisor of Naval Dental Clinic and head of the Reserve Branch and Reserve Personnel Branch at BUMED.

Dr. Farrell is a Fellow of the American College of Dentists and the International College of Dentists, and a member of the American Dental Association, the American Academy of Gold Foil Operators, and the Academy of Operative Dentistry. He holds the Navy Commendation Medal with Combat V, Combat Action Ribbon, Naval Reserve Medal, American Campaign Medal, World War II Victory Medal, Navy Occupation Service Medal with Europe Clasp, National Defense Service Medal with one bronze star, Vietnam Service Medal with bronze star, and Republic of Vietnam Medal with Device.

Facilities

What's Going Up?

It's excuse our dust as the Navy's accelerated medical construction program digs in. Two naval hospitals—Pensacola and New Orleans—and twenty-three smaller facilities are now under construction or nearing completion. Construction begins on two more medical facilities—NRMC Bremerton, Washington, and National Naval Medical Center Bethesda, Maryland—and three smaller clinics this summer.

Plans now call for \$516 million more in medical construction through FY81, including replacement of NRMC San Diego, NRMC Camp Lejeune, and Naval Hospital Cherry Point, and



NRMC Bremerton: Coming in 1980

modernization/expansion of NRMC Portsmouth, Virginia.

Funded in 1972, the accelerated medical construction program will upgrade or replace inadequate naval health care facilities over seven years (FY74-FY81). The program would have taken 10 to 15 years to accomplish under normal funding constraints (see *U.S. Navy Medicine*, November 1975).

Here's what's going up:

- The Navy's newest and largest dental treatment and training facility, scheduled for 1977 occupancy, is under construction in San Diego, California. The \$7 million building, which replaces the present dental clinic and the dental technician school now housed in World War II barracks, will hold 90 dental operating and 10 oral hygiene treatment rooms.
- Construction bids open this month on the 170-bed replacement facility for NRMC Bremerton. Scheduled for occupancy in early 1979, the new hospital will serve about 121,000 active-duty and retired military personnel and their dependents. The site is about halfway between two major naval installations—Naval Shipyard Puget Sound and the new Trident Weapons Facility in Bangor—and next to a 700-unit Navy family housing project. NRMC Bremerton will hold 170 beds, 14 outpatient clinics, administrative offices, and ancillary services such as X-ray, radiology, and physical therapy.
- In Portsmouth, New Hampshire, work has been completed on more than

\$175,000 worth of renovations to the naval regional medical clinic. As part of the renovation of the old naval hospital, two wooden frame buildings were demolished and replaced with a parking lot for patients. Thousands of dollars also went for new medical equipment. With the recent move of the occupational health dispensary into the building, all health care facilities in the Seavey Island naval complex are now consolidated in one building, except for the dental and eye clinics.

- NRMC Oakland's new \$3.5 million branch clinic at Naval Air Station, Moffett Field, California, opened officially in September 1975. The 48,000 square foot building, which replaced an obsolete dispensary about half its size, features more doctors' offices, larger laboratory and pharmacy areas, and expanded parking facilities.
- A new outpatient clinic opened at Brooklyn Naval Support Activity last October. The new facility occupies space renovated at a cost of \$293,000, and is expected to handle an annual workload of 29,000 patients. Following a trend in naval hospitals away from the traditional battleship grey and government green walls of older medical facilities, the new clinic has orange and forest green walls.

FY77 projects now being designed are a new hospital for NRMC Orlando; dispensary/dental clinics at NRMC Jacksonville, Florida, and Naval Air Station Brunswick, Maine; dental clinics at NRDC Newport, Rhode Island,

and Naval Air Station North Island, California; and dental clinic/dispensary work at Navy Supply Corps School Athens, Georgia.

Dental Techs

How to Get SET

Selections of enlisted dental technicians for specialty training is now more systematic and equitable, thanks to a new Specialty Enlisted Training (SET) Committee set up in February.

The committee's job is to ensure that every dental technician gets the same consideration and opportunity for specialty training. Also, the committee will regulate the flow of students into training to provide the Navy with a more even distribution of technical skills.

Until now, dental technicians were chosen for training on a first come, first served basis—but sometimes a dental technician might miss a class that convened while he was on sea duty. Under the new system, the SET committee may try to change a person's rotation date if the applicant merits training.

In the past, too many—or sometimes not enough—students might be trained for a particular specialty. Now, the SET committee matches the number of students trained for a specialty to the projected need for that skill.

One representative each from BU-MED (Code 6), the Bureau of Naval Personnel (Pers 517) and the Health Sciences Education and Training Command (Code 5) make up the SET committee. They will meet quarterly to select the best candidates.

Applications must be in by 31 May, 30 August, and 29 November 1976; and 28 February, 30 May, 29 August, and 28 November 1977. Dental technicians should apply for specialty training through their chain of command. Each application must include a Navy dental officer's detailed recommendation. A practicing prosthodontic dental officer must recommend applicants for training in dental laboratory technology. Commanding officers verify the recommendations and forward applications to BU-MED Code 611.

Applicants will be told whether they have been selected for training four to six weeks after the cutoff dates. See BU-MED Instruction 1510.13A of 4 February 1976 for details.

Health Benefits

The CHAMPUS Changes Hit

Shock waves from recent CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) changes will soon be felt in naval medical facilities. The new rules require all beneficiaries who live within 40 miles of a uniformed services hospital to obtain a nonavailability statement before seeking non-emergency inpatient care from a civilian hospital.

Previously only dependents of active-duty personnel had to obtain such statements, and then only if they lived with their sponsor within 30 miles of a uniformed services facility.

The changes—part of the 1976/77 Military Appropriations Act that became effective 9 February—can be expected to pile more paperwork on Navy medical facility staffs. No accompanying increase in manpower or funds has been authorized to get the job done.

Nonavailability statements may be issued only by commanding officers of uniformed services hospitals or their designated representatives, and only for authorized inpatient care that cannot be provided by any uniformed services medical facility within a 40-mile radius of the patient's home. This latter requirement may be waived if:

- A maternity patient lives more than 30 miles from a uniformed services hospital.
- The hospital CO determines that local conditions—traffic, tolls, waterways, etc.—impose unreasonable cost or difficulty in reaching the uniformed services facility.
- A patient already receiving civilian outpatient care requires hospitalization, and it is medically advisable that care continue to be provided by the civilian source.
- Another condition exists which justified a waiver before these CHAMPUS changes—for instance, when a second professional opinion is needed.

Another provision of the 1976/77 Military Appropriations Act requires CHAMPUS beneficiaries to obtain non-availability statements for civilian pastoral, family, child, or marriage coun-

seling, if such services are offered at a military facility within 40 miles of their home. Previously, CHAMPUS beneficiaries were free to choose civilian or military counseling.

The Act also prohibits CHAMPUS payments for:

- Special education, except to supplement active institutional psychiatric treatment.
- Christian Science practitioners.
- Therapy or counseling for sexual dysfunctions.
- Treatment of obesity, if the sole or major condition treated.
- Reconstructive surgery based solely on psychiatric needs.
- Other services or supplies not medically or psychologically necessary to diagnose and treat mental or physical illness, injury, or malfunction.

Beneficiaries should consult a health benefits counselor or CHAMPUS adviser before receiving care, if they want CHAMPUS to share the cost. When such help is not available, beneficiaries may write the Bureau of Medicine and Surgery (Code 73), 2300 E St., N.W., Washington, D.C. 20372, or OCHAMPUS, Denver, Colorado 80240.

corpsman to amputate the end of the injured finger.

The RMDS concept, which employs commercially available voice and slow-scan video transmission equipment, was developed for BUMED by the Naval Electronics Laboratory Center, San Diego, California. NELC is the Navy's principal research, development, test, and evaluation center for command control and communications concepts and systems, standardized electronic modules, computers, and machine languages.

The RMDS system can transmit medical clinical data, including electrocardiograms, X-rays and photographs, along with voice. When shipboard medical personnel want to communicate with a shore facility or another ship, they notify the ship communications officer. An appropriate link is established. Then, the system's camera is focused on the subject, and the video is transmitted (55 seconds transmission time). When the entire picture has been received, it may remain on display for 20 minutes without deteriorating. The terminal also includes a magnetic tape cassette unit for recording and playing back all voice and video information.

John Silva, Ph.D., head of NELC's Biosystems Engineering Group, said existing Navy communications networks provide the capability for any Navy ship to access a land-line connection to ashore medical facilities from almost any spot in the world. In the future, he said, satellite voice channels will provide a high-quality, low error-rate, long-haul communications medium for the remote system's operation.

Research

Remote System Sees First Emergency

The remote medical diagnosis system (RMDS), designed to improve shipboard medical care and alleviate the shortage of Navy physicians at sea, has proved itself in its first real emergency.

While the system was being tested at sea aboard the USS *Alamo* (LSD 33), a work-related accident crushed the tip of a Navyman's finger. There was no physician aboard, so the corpsman in charge contacted the physician aboard USS *Juneau* (LPD 10), where the remote medical diagnosis system was also being tested.

The physician asked that a picture of the injury be sent him via the RMDS terminal. On the basis of the image he received, the physician instructed the



Remote system tested

The Five-Year Cruise

Medical Inspector Benjamin F. Gibbs reports on conditions aboard the U.S. Flagship Richmond in 1876:

The marines on board of this ship have been in her such a length of time, that their mental condition in some instances and moral tone would be necessarily greater than that of average strength, were they not seriously affected by this long confinement. There are now on board seventeen marines who joined the ship in Philadelphia in 1872 as part of the complement of the ship, and will have been five years on board in November of this year, 1877. The seamen and others of the crew have been changed once in this time. This very protracted life on board, with a knowledge that their shipmates left the ship two years ago, causes naturally a semi-hopeless, demoralized condition, which tends to divest them of that soldierly spirit and action for which they are celebrated. While laboring under such depressing influences it is but just to state that the marines were most active and efficient in the performance of their duties. But why should marines be called on to bear the fatigue and demoralizing tendencies of a protracted cruise of five years, which the length of their enlistment allows, while a seaman may be less than three years in a cruising ship?

The peculiarities of ship-life bear alike on all men, whether seaman or marine, and as I believe that when a man makes a short cruise he becomes less dissatisfied with a ship and more willing to go to sea again, such protracted confinement in future should be corrected by a general order requiring that the marines should be relieved when the seamen are, or at the end of three years, on board ship. The rigid observance of this order would in no little contribute to the happiness and efficiency of a most important part of the Navy.

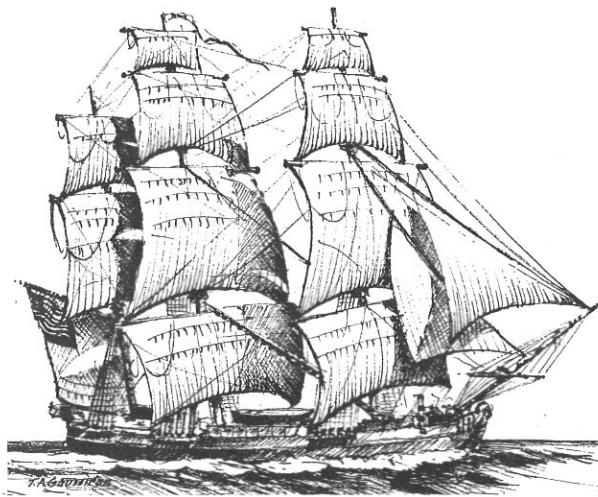
A material increase of the pension-list, admissions to which are made from all parts of the service, may be prevented by carefully removing all well-known enfeebling influences which may unnecessarily expose men to disease. Among these, the confinement to an artificial life on board ship, at one time sleeping in vitiated air, or on post in a confined hold, in the storm or blistering sun at others, with pangs at times of a demoralizing and depressing nostalgia,

must not be overlooked in keeping a man five years in a ship of war.

When vessels of our service shall be so constructed that the heavy beams and knees, which now so seriously occupy the air and living space on the berth-deck, shall be abolished, I know of no one thing which will improve the moral condition of the sailor so much in his daily trials, with few conveniences and no comforts, as the erection of tables on which to take his meals or read or write, with benches to sit on while so doing, like a civilized human being. . . . But the comfort and civilizing influences of these things will not be realized unless ports be introduced into the side of the ship, 20 by 14 inches, to admit light and air. With these, lockers should be made along the side of the ship, in which every man might keep his bag of clothing under lock and key. When such provisions shall have been made for the comfort of the seaman, it will be an advance in the service most truly beneficial to the moral and hygienic conditions of a sailor's surroundings.

The present clothes-bags are unsightly and disfiguring to the whole berth-deck. The cheerful character that this part of the ship assumes when these bags are covered with white canvas for a Sunday morning's inspection conveys some idea of what smooth white walls would be as a permanent thing. It is difficult to estimate the value of smooth walls on the berth-deck as auxiliaries to ventilation, and the value of reflected light to etiolated inhabitants of this same part of the ship.

—Hygienic and Medical Reports by Medical Officers of the U.S. Navy, prepared for publication, under the direction of the Surgeon General of the Navy, by Joseph B. Parker, A.M., M.D., Surgeon, U.S. Navy. Washington: Government Printing Office, 1879, pp. 242-243.



Reserve Specialty Support Capability

CDR George J. Hill, MC, USNR-R

If a national emergency or other crisis occurs which requires Medical Reserve mobilization, knowledge of the qualifications and readiness of available personnel will be an important part of planning. Yet during a previous evaluation of the Naval Medical Reserve (1), data on Reserve personnel was limited. Projections were therefore based in part on estimates and conjecture. A subsequent review (2) of medical planning for future combat situations was also necessarily based on the past experience of the Medical Corps—particularly its recent activities in Vietnam—rather than on current manpower estimates.

A valuable source of information for estimating Reserve capability recently became available when the Office of the Chief of Naval Operations assessed the background and mobilization readiness of Navy Reserve senior officers in FY74 and FY75. Information obtained in this survey regarding Medical Corps Reserve officers was analyzed to determine what Medical Reserve support would be available for mobilization.

MATERIALS AND METHODS

In FY74, CNO(OP-05R) submitted questionnaires to all senior Naval Reserve personnel (CDR and above). The questionnaires sought basic biographical data, addresses and telephone numbers, days available for active duty, how much notice would be required for active duty, naval district or residence, foreign language and travel experience (including familiarity with foreign countries), civilian occupation, original source of entry into the Naval Reserve,

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pay status and entry base date, name of medical school and year completed, hobbies, security classifications, and a summary of special qualifications, interests, number of personnel supervised, and size of budget managed.

The questionnaires were used to prepare computerized information forms for each reporting officer. Reports were submitted voluntarily, and not all items were answered by every reporting officer. Printouts of the data for individual officers were made later in FY74. The data base was updated in FY75 when new biographical forms were received from reporting officers. The current edition of the *Directory of Medical Specialists* (3) was reviewed to determine which of the 639 reporting officers were certified by medical specialty boards.

RESULTS

The 639 responding physicians ranged in age from 33 to 62 years, with a median age of 45. Six of the respondents were rear admirals, 181 were captains (two have been subsequently selected for rear admiral), and 424 were commanders at the time they prepared their biographical sketches. Three women responded. Certification by one or more major specialty boards was indicated in the *Directory of Medical Specialists* for 446 physicians (Table I). Thirty-six physicians were certified in two major specialties, and one in three major specialties.

The board-certified physicians demonstrated a wide range of special interests, skills, and experiences. At least 28 of these physicians were listed as pilots or as having special qualifications in aviation medicine; there were also eight pilots and aviation medical specialists among the physicians who were not board-certified.

Of the 193 respondents not listed in the *Directory of Medical Specialists*, 69 indicated a special medical qualification (Table II). Because of the additional

**TABLE I. Certified Specialties of Navy Medical Reservists
(Multiple specialties listed in parentheses)**

Anesthesiology	10	
Colorectal surgery	1	(General surgery)
Dermatology	5	(Pediatrics-1)
Family practice	17	
Internal medicine	66	(Nuclear medicine-5 Pathology-2)
Neurosurgery	12	
Nuclear medicine	10	(Internal medicine-5 Pathology-1)
Ob/Gyn	45	
Ophthalmology	30	
Orthopedics	30	
Otolaryngology	12	
Pathology	29	(Internal medicine-2 Nuclear medicine-1)
Pediatrics	30	(Dermatology-1 Surgery-1 Preventive medicine-1)
Plastic surgery	2	(Surgery-1)
Physical medicine and rehabilitation	6	
Preventive medicine	11	(Pediatrics-1)
Psychiatry and neurology	24	
Radiology	14	(Internal medicine-1)
Surgery	56	(Colorectal surgery-1 Plastic surgery-1 Pediatrics-1 Thoracic surgery-24)
Thoracic surgery	24	(General surgery-24)
Urology	12	
Total	446	

biographical data, hobbies, and other qualifications shown on the computer printouts, a special interest or capability could also be identified for all but 96 of the reporting officers. Many of the respondents indicated a number of additional special interests or qualifications, including extensive foreign travel, foreign language capabilities, and responsible civilian positions.

Other information regarding the Reserve medical officers included their original source of appointment in the U.S. Navy. Of the officers for whom the original source of appointment was known, 126 (25%) indicated direct appointment as a Medical Corps ensign. The other major sources of appointment

TABLE II. Capabilities and Interests of Non-Board-Certified Senior Navy Reserve Physicians

Alcohol rehabilitation	1	Medical education (Dean)	3
Allergy	1	Medical history	1
Anesthesiology	4	Medical oncology	1
Aviation medicine	8	Neurosciences	1
Bacteriology	2	Nuclear medicine	1
Bioelectronics	1	Neurosurgery	1
Cardiology	1	Ob/Gyn	3
Colorectal surgery	1	Osteopathy	1
County health service	1	Otolaryngology	3
Dentistry	1	Pharmacology	2
Dept. Health, Ed. & Welfare employee	2	Psychiatry	3
Endocrinology	2	Psychology	1
General practice	3	Radiology	1
Hand surgery	2	State health dept.	2
Hospital director	5	Thoracic surgery	1
Industrial medicine	2	Toxicology	1
Internal medicine	1	Urology	1

were World War II programs and officer candidate programs, which together accounted for 65 (12.9%) of the appointments. Only 11 physicians were appointed from alien status.

About 90% of the officers indicated some type of security classification. Pay status was also indicated for most of the officers. However, a spot check of this information did not show a high degree of correlation with the officers' present pay status; this data is now probably obsolete as a result of restructuring of the Navy Reserve and the reassignment of pay billets.

Availability for voluntary recall to temporary active duty was indicated by 257 of the 639 responding officers, for periods ranging from 1 to 190 days (median 14 days). These physicians offered a total of 4,913 voluntary days of active duty. The most common responses were 7 days (21 physicians), 14 days (111 physicians), 15 days (22 physicians), 21 days (10 physicians), 30 days (47 physicians), and 60 days (5 physicians). These officers indicated that advance notice of zero to 180 days (median 30 days) would be desirable before callup. The desired advance notification time was generally twice as long as the volunteered period of active duty. Approximately 10% of the non-board-certified physicians gave addresses which suggested that they were currently on active

duty and could not be used to augment active-duty forces.

The total available days of active duty for these 639 officers can be estimated by adding the usual 14 days of annual active duty for training (total: 8,946 days) to the voluntary active duty specified on the returned questionnaires (4,913 days). Thus the total annual active duty time available would be approximately 13,859 days, or 38 man-years.

The medical education of the Reserve physicians was largely obtained at American schools (Table III). Only 33 (5%) were graduates of foreign medical schools. Of the physicians trained in the U.S., 253 (43%) were graduates of schools that are predominantly state-supported. Another 335 graduates (52.4%) were graduates of private schools. The six medical schools with the largest numbers of graduates among this group were Jefferson, Tennessee, Harvard, George Washington, Pennsylvania, and Temple. These six schools graduated 17.5% of the senior Medical Reserve officers. Three officers were graduates of osteopathic schools. Another 15 officers did not specify a medical school.

The data shows that, because of the limited number of specialists available in any single naval district, Reserve physician coverage of billets other than internal medicine and general surgery would have to be performed by a pool of physicians assembled from various naval districts. Theoretical assessment of surgical coverage is also based on the assumption that thoracic surgeons would perform general surgery. Although all thoracic surgeons are board-certified in general surgery, some probably do not perform this specialty in their civilian practice. Some of the non-certified physicians, however, indicated that they *do* perform surgery in their civilian practice; these officers might be assigned to a surgical billet under supervision.

DISCUSSION

Some 70.4% of the physicians who responded to the OP-05R questionnaire were certified by one or more medical specialty boards. With additional information available for non-board-certified physicians, we could identify a special capability of medical or military importance for 85% of the responding officers. More than half of the Reserve medical officers reported being 45 years or older, and 21.6% were over age 50. Recruitment and retention of younger medical officers is vital to ensure an ample supply of well-qualified, readily available Naval Reserve physicians.

While we have no data to compare Reserve medical officers with their non-Reserve civilian counterparts, it appears that the physicians in the OP-05R survey are particularly active in civilian medical and nonmedical activities. Skills in the areas of athletics and aviation might be particularly useful in a national emergency, and many reporting physicians indicate good physical fitness and participation in vigorous physical activity.

The backgrounds of the senior Navy Reserve physicians show that a relatively high percentage (43.7%) were enrolled through early commissioning programs or transfers from other military programs. This estimate is based on the 503 physicians who listed the source of their appointment. A relatively high percentage (52.4%) were educated at private medical schools, and five of the six schools that produced the greatest number of Reserve physicians

TABLE III. Medical Schools of Senior Navy Medical Reserve Officers

Alabama	6	North Carolina	2
Albany	1	Northwestern	11
Arkansas	5	Ohio State	10
Baylor	3	Oklahoma	6
Boston U	5	Oregon	8
California	9	Pennsylvania	16
California Medical	2	Philadelphia	
Case Western	6	Osteopathic	2
Chicago Medical	5	Pittsburgh	11
U of Chicago	5	Rochester	5
Cincinnati	4	Saint Louis	13
Columbia	11	South Carolina	10
Colorado	8	Stanford	10
Cornell	8	State U of N.Y.	12
Creighton	6	Syracuse	2
Duke	6	Temple	16
Emory	3	Tennessee	20
Florida	1	Texas	13
George Washington	16	Tufts	10
Georgia	8	Tulane	14
Georgetown	9	U of Southern Calif	2
Hahnemann (Phila.)	4	Union Medical College	3
Harvard	19	UCLA	3
Howard	1	Utah	3
Illinois	12	Vanderbilt	1
Indiana	6	Vermont	6
Iowa	11	U of Virginia	10
Jefferson	25	Virginia Commonwealth	11
Johns Hopkins	8	Wake Forest	4
Kansas	13	U of Washington	5
K.C. Osteopathic	1	Washington U (Mo)	10
Loma Linda	5	Wayne State (Mich)	8
Louisiana State	13	Wisconsin	10
Louisville	5	Yale	6
Loyola	8	Yeshiva	2
Marquette	7		
Maryland	6	Unspecified	15
Meharry	1		
Miami	4	Foreign	33
Michigan	8	Canada	7
Minnesota	8	Europe	11
Mississippi	2	Latin Amer	4
Nebraska	9	Asia	11
New York U	7		
New York Medical	6	Total	639

were private schools. It thus appears that early commissioning programs in private medical schools are a promising area for recruiting career Navy Reserve physicians.

Data on junior Navy Reserve medical officers (LCDR and LT) would be useful for a general overview of the characteristics of the Navy Medical Reserve. Since few of these officers are board-certified, and since many are not fully committed to the Reserve concept, their capacity to perform medical specialty service at the time of mobilization will probably be somewhat limited. Some of these physicians are actually not available for callup since they are awaiting their scheduled period of active duty as Berry Plan physicians. Nevertheless, it is from the pool of junior officers that the Navy Medical Reserve of the future will be recruited.

Only three (.5%) of the senior Reserve medical officers are women. It is likely that there are more women in the junior officer category, and that more will be commissioned in the future through the Navy scholarship programs. The careers of these women physicians should be followed closely.

The pool of physicians available for specialty support can be affected by increases or decreases in retention, changes in the rate of promotion from LCDR, or changes in the age of retirement. In addition, recent trends in medical education have produced more physicians who seek specialty training and obtain specialty certification at an earlier age. These changes will increase the specialty support capability of the Navy Medical Reserve; however, they will also decrease the capability of the Reserve to accomplish tasks usually assigned to general medical officers.

Although change occurs continuously in the composition of the personnel surveyed, the overall pattern probably shows considerable stability from one year to the next, since the most senior officers enter the retired list each year and are replaced by the more senior lieutenant commanders. Thus the information presented in this report represents a reasonable assessment of the specialty support capability of the Navy Medical Reserve for a considerable period of time.

REFERENCES

1. Eiseman B, Hill GJ: The Navy Medical Reserve, present and future. *Milit Med* 137(2):45-49, 1972.
2. Eiseman B: The next war: a prescription. *U.S. Naval Institute Proceedings* 101(1):33-40, Jan 1975.
3. *Directory of Medical Specialists*, 16th ed. Chicago: Who's Who, Inc., 1974.

Scholars' Scuttlebutt

Physician-Officers

A BUMED selection board recently reviewed applications from medical and osteopathic students for second- and third-year subsidized medical school positions. All of the candidates were outstanding enough to merit scholarships. But because openings in the scholarship program are limited, many capable applicants were turned down.

What influenced the board's choices? The applicant's enthusiasm for his or her role as a naval officer counted a great deal. In the past, naval medical officers sometimes thought of themselves as apart from the Navy community, sometimes considered their supposed "uniqueness" an excuse to ignore the Navy's primary mission—providing the first line of defense for our country.

But the Navy Medical Corps, of which you will soon be members, *must* support the Navy's mission. You must play dual roles, assume dual responsibilities as Navy officers and physicians. Neither role can exclude nor compromise the other. Your early and wholehearted acceptance of this crucial fact is the key to a full and meaningful career in the Navy. That is why the board sought candidates who want to be not just physicians, but *Navy* physicians.

Our commitment to support the Navy's mission will also be reflected in the structure of future training. In the 1977-78 training year, we will begin to group first-year medical specialty programs into a Basic Medicine year, and surgical specialty programs into a Basic Surgical year. Each of these years will provide a training base for advancement into specialty training. Also, these years and the remaining categorical programs will be structured to provide a broad experience in clinical and naval skills that will enable every Navy physician to play a significant role in the operational Navy.

Most of you will serve a tour in direct fleet support before you continue specialty training. All first-year graduate medical trainees will be required to reapply for further training.

Some of you may be dismayed by these changes. But if you see them as a part of your total Navy experience, you can easily understand their appropriateness.

Next month, "Scholars' Scuttlebutt" will carry a list of graduate medical education positions available for 1977 graduates, and instructions for applying.

On Duty

NRMC Cherry Point

What's A Nice Girl Like You...

The rain pours from the black sky as a cold December wind whistles through the trees. Crouched in the thick underbrush, two figures huddle together trying to keep warm.

A fire is out of the question. The flickering of a flame could draw the enemy.

After catching their breath for a few moments, the two figures slowly move on. Their mission—to stay ahead of the aggressors and find their checkpoint within the given time.

Thorns and briars are so thick even small animals find it difficult to pass through. The pair crawls on their bellies to keep from being mauled by the clutching fingers of the underbrush.

With soggy map in hand, they try to get their bearings with their unreliable compass.

In the distance, an accented voice can barely be heard. "We get you, Yankee! You leave tracks a mile wide. We get you, Yankee!"

The two pause, straining to distinguish from what direction the voice is coming. "I wonder how far away they are," says HN Tammy Haskett of Cherry Point Naval Hospital. "Who knows?" replies HM3 Patricia Guild, trying to untangle her hair from the briars. "All I know is I'm cold, I'm tired, and I want to go home!"

But they can't go home, at least not until they have found all three checkpoints outlined on their maps.

What are these two women doing out in the boonies with a map and compass? They're the first women to enter Survival, Escape, Resistance and Evasion (SERE) School. The five-day course, designed to train pilots and crewmembers in survival techniques, recently took on another job—teaching hospital corpsmen how to survive in enemy territory as medical crewmembers. Survival techniques are taught in the classroom, but since practical application is the best teacher SERE students are also bused out to the Croatan National Forest and left to survive.

"We try to make the field exercise as real to life as possible," says MGYSGT

Miller Scott, noncommissioned officer in charge at SERE. "We furnish the bare necessities and 'aggressors' to harass the students, and Mother Nature furnishes the rest."

When MGYSGT Scott says the "bare necessities," he means just that. The students are given a map, a compass with a whistle attached, a piece of string, a strip of parachute, an empty water bottle, some raw rabbit (if they want it), and some encouraging words. The students are then paired off and sent on their way to find three checkpoints located somewhere within a ten-mile radius. The students will later swear it was at least a 30-mile radius.

Clues are also given. At the first checkpoint the student is met by a friendly partisan who volunteers clues on the best route to take. But the second checkpoint isn't so easy. Here students find a partisan who must be paid for his information. By the time the students reach that point, they are in no mood to argue.

Finally, the bedraggled searchers reach base headquarters where there are picnic rations, a warm tent, and even a cold beer.

"It was quite an experience," said HN Haskett, shivering in her rain-drenched boots after her ordeal ended.



Standoff at Checkpoint 2

"We never knew what to expect next. We kept thinking it had to get better, it couldn't get any worse, but it just kept getting worse."

"I'm glad it's over, but I'm also glad I completed the school," she continued. "I proved to myself and to others that women can hack it, too."

"The two women did an outstanding job," said MGYSGT Scott. "They were enthusiastic and accepted the training well. They really had to be tough to make it through the training."—Story and photos by SGT Peggy Cauley, PAO, Cherry Point, N.C.

Dental Team Shines in Operation New Life

This month, Navy dental technicians celebrate the 28th anniversary of the establishment of their rating. A shining hour in that history was their support of Operation New Life. In the report that follows, CDR Melvin Ervin, Jr. (DC) tells what it was like to provide dental care to thousands of Vietnamese refugees who found temporary shelter on Guam. It all began one year ago, on 23 April 1975. . .

The arrival of the first plane load of Vietnamese refugees last April marked the start of *Operation New Life* on

Guam. By the time it was over, nearly 130,000 refugees passed through Guam on their way to new homes in the United States and elsewhere.

Early in the operation, staff members of Naval Regional Dental Center Guam, under the command of CAPT E.J. Heinkel, Jr. (DC), began treating the many evacuees who needed emergency dental care. Only hours after the first planes landed, CAPT William C. Sullivan (DC) and three other officers from the branch dental facility were providing care in a one-chair temporary dis-

pensary in the refugee compound. Three days later, Orote Point—"Tent City"—was created: it sheltered over 91,000 refugees during its 66 days of operation.

Until the dental center's two-chair mobile dental unit was connected to water and power sources, the Navy team of dental officers and dental technicians provided emergency care in a tent, using a surplus dental chair and flashlights. A second temporary four-chair facility was set up in a Southeast Asia hut at the Army's 702nd Field Hospital. Although hot, dusty, and crowded, this facility handled the overflow of patients from the mobile unit. The two treatment centers operated until Tent City was closed late last June.

The Navy dental team also treated refugees at six smaller compounds in other parts of Guam. For a while, a field chair and light were carried to the sites in private vehicles. Later, when enough equipment became available, a passenger bus was converted into a second two-chair mobile dental unit. This unit was set up at Camp Asan, whose population had peaked at about 7,000. Treatment was provided there until early August.

During the most critical times, dental officers and technicians of NRDC Guam manned the treatment facilities seven days a week, fifteen hours a day. They were assisted by about a dozen Vietnamese dentists who volunteered their services until they were transferred to the mainland. Vietnamese dental students and technicians were invaluable as assistants and interpreters.

The refugees' dental problems covered almost the entire spectrum of dental disease. The teeth of virtually all teenagers and younger children showed rampant caries, perhaps a sign of Western influence. Many children had no restorable teeth: their "dentitions" consisted of retained root and tooth fragments from their baby and permanent teeth. The older Vietnamese, on the other hand, often had all teeth intact with little or no caries, but they frequently showed advanced periodontal disease. Sometimes the posterior teeth of these older refugees could be removed using only finger pressure.

Because of the overwhelming problems, dental treatment was directed to relief of pain and control of acute dental infections. The naval dental team performed over 31,000 procedures, including 6,500 extractions and 5,000



DN Debbie Peterson helps Vietnamese dentist in Tent City

fillings. About 12,000 patients were seen. Some 50,000 toothbrushes and tubes of toothpaste were distributed, and home oral hygiene instruction was given on a limited basis. At the same time, comprehensive dental treatment was provided for the personnel temporarily assigned to Guam in support of *Operation New Life*.

Many fillings and toothbrushes later, Tent City folded its tents and slipped into history. And the Navy Dental Corps secured a place for itself in that chapter of history. Just goes to show, once again, that the Navy shines under stress.

—CDR Melvin Ervin, Jr., DC, USN, Naval Regional Dental Center Guam, FPO San Francisco 96630.

NRMC Yokosuka

Rising Sons

It's a bird! No... it's a plane! No... it's Superman?

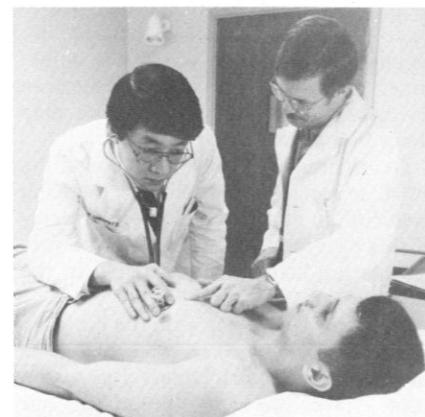
Wrong again. The blur rushing by is one of six Japanese interns in a post-graduate training program at Naval Regional Medical Center Yokosuka, Japan. His tornado-like pace results from a daily schedule packed with laboratory work, lectures, and patient care.

In the program's 23 years, over 215 Japanese interns have received their postgraduate training at the naval medical center. Most of the interns come to the hospital directly from Japanese medical schools or private practice. They soon find the training program different from anything

they've experienced in medical school, says CDR Robert M. Alston (MC), chief of medicine and director of the post-graduate training program.

"The Japanese medical school system is unlike America's in that Japanese students get a lot of exposure to lectures and reference material but not much actual patient care," he explains. "When they arrive here they know a lot about diseases and biochemistry, but patient care is a new experience for most of them."

Most Japanese doctors practice in a specialty or subspecialty and are not expected to have as broad a working knowledge of other medical branches. To expose interns to different areas of medicine, the Yokosuka program offers a rotating internship in which the Japanese interns spend two months each in six different fields: internal medicine, pediatrics, orthopedics, general surgery, obstetrics and gynecology, and



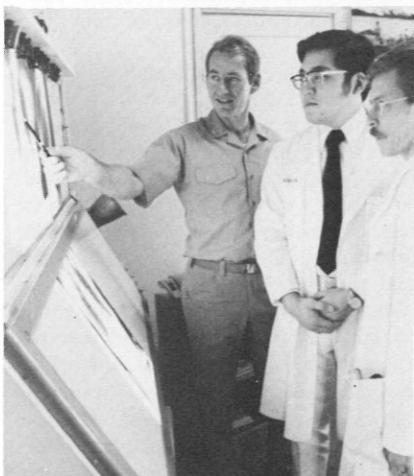
Drs. Sakamoto and Alston
A new experience

BUMED SITREP

mixed surgery (a combination of sub-specialties, including urology). At present, Yokosuka is the only hospital in Japan offering Japanese medical school graduates the benefits of a rotating internship with direct exposure to patient care.

The number of interns in the program has varied from one to fourteen; about one of every five applicants is selected.

"Applicants are usually in the top 20% of their graduating class, and the ones we select are in the very highest bracket," says Dr. Alston. "The program appeals to them because it offers an opportunity to gain both fluency in English and a background in American clinical medicine. Competition for selection is stiff, and applicants are tested with both oral and written examinations."



With Dr. Richard Everhart (left)
Rotating internship

The program is also an important meeting ground for Yokosuka Naval Base and the Japanese community. Dependent Japanese wives are sometimes uneasy about seeing American doctors, so the Japanese interns help them feel at home.

Dr. Alston points out that some of the most respected physicians practicing medicine in Japan today are graduates of this program. About 20% of the program's graduates are practicing in the United States.

"Everyone involved with the program at NRMC Yokosuka believes it is successful and worthwhile," Dr. Alston says. "We are very proud of our interns."

—JO3 Betty Pease, PAO, COMNAVFORJAPAN. Photos by JO3 Tim Carney.

PHYSICAL QUALIFICATION . . . It is imperative that each medical treatment facility comply with the provisions of MANMED Art. 15-50 regarding physical qualifications for transfer. Some military personnel are still arriving at overseas stations who are either not physically qualified for their assigned duty, or who require medical care beyond the capability of local facilities. Often such individuals must be returned to the United States via the aeromedical evacuation system, or referred to distant overseas medical facilities for evaluation and treatment.

OBLIGATION FOR TRAINING . . . Effective 1 May 1976, training agreements executed between BUMED and Medical Department officers selected for training will include a statement of the obligated service incurred for training, and the anticipated date of completion of such obligated service. The statement of obligated service will be signed by the officer seeking training, and returned to HSETC with the training agreement for forwarding to BUMED.

PA TRAINING CUT . . . No more hospital corpsmen will be selected for training as physician's assistants, following a program/budget decision last November that deleted all FY77 PA training billets. Corpsmen already selected for or participating in the PA Program will be allowed to complete training.

DENTAL PROFESSIONAL STANDARDS . . . Tests of tentative professional standards for dental officers are scheduled in July. Criteria have been developed to measure objectively the quality of performance in ten areas of dental treatment. The goal: to enable the Dental Corps to account for the quality of delivered care, as a complement to productivity measurement.

MEDICAL AUDITS . . . In line with recent policy changes, medical activity audits will now include an evaluation of the activity's overall efficiency and general management. In the past, only specific areas such as supply, comptroller, or public works were evaluated. Not included in the audit are areas requiring professional medical judgment,

the contents of individual health care records, and details of individual patient treatment. However, the administration and processing of health care records will be evaluated.

USS TARAWA INSPECTED . . . Representatives of the Surface Medicine Division, BUMED Code 52, toured the USS *Tarawa* (LHA-1) in January to evaluate the installation of medical and dental equipment, and inspect the ship's construction. Future visits by BUMED personnel are scheduled to evaluate sanitation hazards, and to inspect the central oxygen gas system, patient monitoring equipment, and anesthesia equipment.

The five LHA-type ships now under construction represent the major medical support ships that will be available for the next five to ten years. Each ship has medical and dental spaces to provide emergency and life-saving care for 300 combat casualties. Because medical support is only a secondary mission of the new ships, there remains a requirement for hospital ships and advance base functional components.

RESERVE PMU OIC'S MEET . . . Officers in charge of the eight newly formed Naval Reserve preventive medicine units met for the first time in January at BUMED. The mission and organizational relationship of the units were defined and explained.

RESPIRATORY THERAPY PAMPHLET . . . "Respiratory Therapy" (NFPA 56B), published in 1973, describes hazards involved in the use of equipment, gases, and cylinders used in respiratory therapy. Hazards are classified under the headings of fire, chemical, electrical, and mechanical. Another chapter lists the requirements for maintenance and care of equipment. The last chapter describes ways to prevent harm to patients and personnel. In the appendix there are related codes and standards from the National Fire Protection Association (NFPA) and other standard-making institutions, descriptions of medical gas cylinders, and a discussion of medical safeguards for patients who require respiratory care.

For further information about this pamphlet, write: NFPA, 470 Atlantic Avenue, Boston, Mass. 02210.

NAVMED Newsmakers

At any one time there are never more than 25 members of the Zoological Society of London—and the newest is **Harry Hoogstraal**, Ph.D., D.Sc. of Naval Medical Research Unit No. 3, Cairo. Head of the unit's Medical Zoology Department and a world authority on ticks and tickborne disease, Dr Hoogstraal became an honorary fellow of the prestigious Society in March. He was nominated for the honor by the Council of the Zoological Society of London, whose president also has considerable prestige: HRH Prince Philip, Duke of Edinburgh.

If students at the University of Maryland Medical School start clamoring for Navy commissions, it may be thanks to the efforts of two young family physicians, LCDRs **Neil Meade** and **Harvey Gross**. Both are staff members at Naval Hospital Annapolis, where they report a growing acceptance of family practice services by patients accustomed to traditional specialty outpatient services. One afternoon a week they are volunteer instructors for 49 family practice residents at the university. "They are a good influence on our residents and an equally good influence on our faculty," says program director Dr. Edward J. Kowalewski. Good recruiters for Navy medicine, too.



LT Balciunas: Mademoiselle



Dr. Sablan: Captain

It's a long way from lieutenant to captain, but Navy dental officer **Birute A. ("Toni") Balciunas** made the jump in a flash—on the pages of *Mademoiselle* magazine. In a March feature on military careers for women, *Mademoiselle* inadvertently pinned captain's rank on the 26-year-old officer. A staff member at the Washington (D.C.) Naval Dental Clinic, LT Balciunas told *Mademoiselle* she likes the opportunity Navy dentistry gives her to learn different techniques as she rotates among various specialties.

A man of many distinctions, Dr. **Ralph G. Sablan** added one more feather to his cap recently when he became the first Guamanian to attain the rank of captain. As the only dermatologist in the Pacific Islands Trust Territory—an area of more than 3 million square miles—the 16-year Navy veteran has organized a leprosy clinic and been appointed to the Guam Health Commission. One of Dr. Sablan's most vocal admirers is Congressman Antonio Borja Won Pat, of Guam, who told the House of Representatives, "I congratulate CAPT Sablan for his military and medical achievements and for his work on behalf of the people of Guam." Hear, hear.

Sometime last fall Navy Dentalman **Ed Vytal** came up with a snappy illustration for the Marine Corps Bicentennial. *Jetstream*, the base newspaper at



Arnolds: Masters

MCAS Beaufort, South Carolina, published the artwork in November. This year there's an unexpected reward: Vytal has been named a finalist in the graphic art category of the 1975 DOD Thomas Jefferson Awards Contest. The annual competition recognizes excellence in the communications media.

At least one Navy household in San Diego now has two masters—ever since LCDR **Mary Ann Arnold** (NC) and LT **Anthony Arnold** (MSC) graduated last January with master's degrees in education from Pepperdine University. Married 2-1/2 years, and both assigned to NRMC San Diego (she's nurse coordinator; he's aide to the CO), the couple found that the year-long program of study tested their ingenuity as well as their intellect. "On Fridays we just had time enough to change into civilian clothes here at work and get to class," says LCDR Arnold. The new degrees are important to the couple's future plans. She hopes to be a nursing instructor. He aspires to the job of academic director of the Naval School of Health Sciences.

It was a first for Naval Hospital Cherry Point as LT **Glenda Golgarth** (NC) re-enlisted her husband of eight months, HM2 **Dale Golgarth**. Both are assigned to the hospital, Dale as clinical assistant in the Outpatient Department, and Glenda as a member of the nursing staff.

Letters

HAIR

Your attractive cover [Jan 76] is almost professional, showing a physician's assistant wearing subtotal surgical operative attire, with mask, gloves, etc., except that human hair, even when wearing Chanel No. 5 tonic, does not promote healing of surgical wounds.

CAPT S. Nuerdini, MC, USN
Chief, Surgical Service
NRMC Orlando, Florida 32813

Editors hate to reveal professional secrets, but . . . the January cover was posed, at our request. Lack of appropriate head covering was apparently a temporary oversight of our helpful PA turned model.

ATTENTION: FLIGHT SURGEONS

I am compiling an annotated directory of aviation artifacts related to flying health and safety. I would like to correspond with active and retired flight surgeons who may have preserved significant life support material.

Robert J. Benford, M.D.
Col., U.S. Air Force (Ret.)
Seacoast Gardens, Apt. 6-A
Indian Harbor, Florida 32937

BERRY PLAN PAY INEQUITY

I would like to review the advantages and disadvantages of the Armed Forces Physicians' Appointment and Residency Consideration Program (Berry Plan).

The military services desired more highly trained and experienced physicians than could be obtained through a draft of medical school graduates and interns. The Berry Plan was devised in response to this need. Advantages for participating physicians included credit, for longevity pay and promotion purposes, for education and training obtained during their inactive years.

The Department of Defense currently awards practically equal credit for education and training to non-Berry Plan "volunteer" doctors and Berry Plan doctors when they are commissioned for active duty. For example, a

Berry Plan officer—a board-certified internist, with eight years of service for pay and promotion—recently promoted to LCDR receives a gross yearly income of \$16,758. Yet a "volunteer" civilian radiologist with eleven years of post-graduate education and experience was commissioned LCDR with 5 years for pay and the full 11 years credited for promotion eligibility. This physician makes \$28,368 per year, \$11,610 more per year than his Berry Plan colleague who is excluded from the Variable Incentive Pay Program under Public Law 93-274.

The obligated service category of Berry Plan officers should have ended with the draft. The doctors understand that they signed a contractual agreement for active duty, but this contract now exists only for the convenience of the government. The government applies rules from an old set of circumstances to hold these physicians under obligation, even though the obligations of men with deferred service in other categories may be waived. The Berry Plan physicians are not paid at the same rate as their peers, a situation inconsistent with the principle of equal pay for equal work.

This is the worst sort of economy. It works against any efforts to retain these doctors on active duty.

The Congress is presently considering H.R. 5679, a bill which, if enacted, would correct this inequity.

LCDR Luke P. Wagner, MC, USNR
NRMC Box 65-1720
FPO Seattle 98765

The three services have received many similar letters since the Variable Incentive Pay Program was implemented under the provisions of P.L. 93-274. While the inequity has been recognized, the law has not yet been revised to authorized variable incentive pay for Berry Plan participants. The Department of Defense has advised the Congress to include Berry Plan physicians under the extension of P.L. 93-274.

DOD Directive 1320.7 of 7 August 1970, which deals with temporary grade determination for officers entering active duty, is now being revised. It has been proposed that total entry grade

credit not exceed 12 years, with a maximum of 3 years' credit for postgraduate experience as a practicing physician.

We doubt that the "full 11 years" were given for promotion eligibility, as LCDR Wagner suggests. All training periods are given full credit, but the credit for experience as a practicing physician is limited to three-fourths the total number of years in practice. Regardless of the established promotion credit, however, the pay variance can only be dealt with by a change in the current pay laws.—BUMED Code 3.

FLAG RANK FOR MSC

I agree with VADM Custis's statements concerning the lack of authorized flag rank for the Navy Medical Service Corps [US NAV MED 65(3):2].

If the present trend to give more responsibility to Medical Service Corps officers is real, the next logical step must be to add a rank commensurate with these duties. The Medical Service Corps now has, and will continue to have, qualified officers to fill such important assignments.

LCDR Douglas W. Call, MSC, USN
Naval Aerospace Recovery Facility
El Centro, California 92243

POW FIRST AID

A former POW recently suggested to me that flight surgeons be trained to teach Navy aircrewmen how to care for their medical needs without first-aid kits, which are inevitably confiscated upon capture. Topics might include how long it takes a sprained ankle or joint to heal without medical treatment, how long it takes a fracture of the leg or arm to heal before one can safely use the extremity, how to control diarrhea without using medication, how to treat a wound, skin infection, or abscess, and how to take care of one's dental needs. Many of the questions that POWs could raise in this area cannot be answered. However, suggestions are sought.

CAPT R.J. Seeley, MC, USN
COMNAVAIRLANT
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U.S. Navy Medicine

Clinical Notes

Cluster Headache

LCDR Russell C. Packard, MC, USN

If you have ever witnessed what happens when a sad-eyed, wrinkle-faced foxhound gets a snoot full of porcupine quills, you'll easily recognize the patient in a cluster headache attack, for the pain is so severe, he generally can't stay still.

Cluster headache occurs predominantly in men and is almost always unilateral, but may change sides in the middle of an attack or in the middle of a cluster of attacks. The pain is usually located in the region of the eye or temple, but may include all the areas served by the carotid arterial tree. Usually steady and boring, the pain may at times be pulsating. The duration of the attack is usually between 15 to 90 minutes, and attacks may recur once a day or up to five or ten times a day. Attacks frequently occur at night or during periods of dozing, and especially in REM-stage sleep.

During a cluster, the attacks may be precipitated by alcohol, nitroglycerin, or an injection of histamine. In the free periods between clusters—which may be weeks, months, or years—the same stimuli will not precipitate an attack.

Clusters of headaches are apt to occur when an intense way of life is suddenly relaxed, such as during vacations or at the end of a school year. Sometimes the attacks occur when a person's activity is retarded because of depression.

Cluster headaches must be distinguished from such conditions as acute sinusitis, acutely abscessed teeth, spontaneous corneal erosions, acute glaucoma, tic douloureux, and common migraine.

Treatment of an acute attack is best effected by a combination of a single dose of ergotamine tartrate, whether in sublingual form, oral tablet, or parenteral injection, and a substantial dose of pain

killer. Therapy with ergotamine should begin as soon as possible after the first symptoms of the attacks are noted, since the chances for successful treatment diminish with delay. The usual dose is 2.0 mg. by mouth or 0.5 mgs. intramuscularly; this may be repeated in 15 minutes if the headache is not subsiding. Dosage should be limited to not more than 10 mgs. in any one week. Histamine desensitization is no longer recommended for treatment.(1)

Drugs that have been used for prophylactic therapy include methysergide, propranolol, ergotamine, cyproheptadine, antidepressants, and steroids,(2) though the very number of these agents indicates their relative ineffectiveness. The usefulness of acupuncture, biofeedback, and transcendental meditation has not yet been established, but these techniques remain of considerable interest.

REFERENCES

1. Delessio DJ (ed): Wolff's headache and other head pain. 3rd ed. Oxford University Press, 1972, pp. 350-353.
2. Graham JR: Cluster headache. Headache 11:175, 1972.

DON'T MISS

The maxillofacial region is involved in all interpersonal relationships, and relates to some of the deepest human needs. In "Psychological Considerations in Maxillofacial Prosthetics," Darrel Edwards, Ph.D. and L.W. Bailey, Ph.D. consider the psychological impact of maxillofacial changes caused by disease, injury, or treatment, and the resulting problems.

To the extent that dentists appreciate the many psychological aspects of maxillofacial prosthetics—the patient's expectations, personality, and ability to accept the prosthesis—they will be able to ease their patients' potential problems. Their understanding and use of psychological factors should result in more effective treatment and rehabilitation of the maxillofacial patient.

"Psychological Considerations in Maxillofacial Prosthetics" appeared in the *Journal of Prosthetic Dentistry* 34(5):533-538, November 1975. Reprints are available from the Naval Health Research Center, San Diego, California 92152. Ask for Report No. 74-7.

LCDR Packard is a resident on the Neurology Service, National Naval Medical Center, Bethesda, Maryland 20014.

Professional

An Analysis of First-Year Referrals to a New Military Child Psychiatry Clinic

James H. White, M.D.

The child psychiatry outpatient clinic at Naval Regional Medical Center, Portsmouth, Virginia, was established in September 1973 to care for children who until then had been referred to the civilian medical community. The new clinic was structured so that families could either refer themselves, or be referred by other physicians or by community social agencies, such as juvenile courts.

When the parents called for an appointment, they were sent a detailed parents' history form and a school form to complete and return to the clinic before the initial evaluation. These forms requested pertinent biographical data and other information about the parents and the child. A diagnostic evaluation was subsequently conducted by a child psychiatrist. After the evaluation, recommendations were made for treatment.

The treatment available included chemotherapy with supportive psychotherapy and short-term, family-oriented psychotherapy. Usually, the intervention encompassed 6 to 10 one-hour individual or family therapy sessions. The child's symptoms might also be treated chemotherapeutically, with supportive psychotherapy for the child and supportive counseling for the family. Children treated adjunctively with chemotherapy were seen less frequently, but over longer periods of time. Children on short-term psychotherapy were seen weekly until the contracted number of interviews was completed.

Dr. White is assistant professor of child psychiatry and pediatrics at the University of Texas Medical Branch, Galveston, Texas 77550. He collected the data presented in this article while a LCDR in the Naval Reserve on active duty at the Naval Regional Medical Center, Portsmouth, Virginia.

The Portsmouth clinic served all military personnel in the Tidewater area who were authorized treatment—Army, Air Force, Coast Guard, and Marines, as well as Navy personnel. From September 1973 to April 1974, the period covered in this report, there were 95,941 active-duty uniformed services personnel assigned in the area: Army-916; Air Force-8,488; Coast Guard-1,597; Navy 82,603 total with 22,212 ashore and 60,391 afloat. There were 2,337 Marines, including 295 officers and 2,042 enlisted personnel, all stationed ashore. There were also 128,719 dependents of active-duty personnel, 13,155 retired personnel, 35,342 dependents of retired or deceased personnel, and 29,945 others for whom treatment was authorized. The total number of persons authorized to receive medical treatment was 303,102.

From data supplied by the Department of the Navy it was not possible to determine the exact number of dependents who fell within the range of eligibility for services in the Child Psychiatry Clinic. This clinic was limited to children below the age of 18 who were still residing with their parents and were still attending school. There was no lower age limit (1).

METHOD

From September 1973 through April 1974, a total of 241 children were evaluated in the Portsmouth Child Psychiatry Clinic. Of these 13 (5%) failed to keep a follow-up appointment. Nine patients (4%) were hospitalized elsewhere because their condition required treatment not available on an outpatient basis. Another 65 children (27%) were seen only for evaluation, including children for whom no treatment was indicated, children who needed more

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extensive treatment than the clinic could supply, and children whose treatment was accomplished elsewhere, or for whom treatment was not possible.

Of the total population, 97 (40%) were self-referred, 102 (42%) were referred by other military physicians, 10 (4%) by other psychiatrists, 14 (6%) by local school systems, and 15 (6%) from various other agencies.

Information was obtained on the incidence among family members (including grandparents) of epilepsy, mental retardation, alcoholism, psychiatric hospitalization, suicide attempts, and other types of mental illnesses. Psychiatric hospital admission for the father or the mother and alcoholism in the grandparents were most frequently reported (see Table I).

RESULTS

Analysis of the data regarding the fathers of patients showed that 183 (76%) were the patients' natural fathers, 35 (15%) were stepfathers, 16 (7%) were adoptive fathers, and 5 (2%) were foster fathers. Of these men, 127 (53%) were between the ages of 30 and 39 years; another 32 men (13%) were 20 to 29 years; 68 (28%) were 40 to 49 years; 10 (4%) were 50 to 59 years.

One hundred and forty-six (61%) of the fathers were high-school graduates, while 28 (12%) had not completed high school. Thirty-nine men (16%) had

training or education beyond high school, with 18 (8%) being college graduates. Four men (.2%) had advanced degrees.

Most of the fathers (145 or 60%) were active-duty enlisted men. Another 32 (13%) were officers on active duty, and 57 (24%) were retired personnel who were employed at the time of evaluation. Seven men (3%) did not reveal their occupational status.

Of the mothers interviewed, 27 (90%) were the biological mothers of the patients, 9 (4%) were stepmothers, 12 (5%) were adoptive mothers, and 2 (.8%) were foster mothers. Forty-six (19%) of these women were between the ages of 20 and 29 years, while 131 (54%) were between the ages of 30 and 39 years—almost identical to the data reported by the fathers. Another 54 women (22%) were between the ages of 40 and 49 years, and 5 (2%) did not reveal their age.

Fifty-five (23%) of the mothers had not finished high school. Another 125 (52%) were high-school graduates, while 37 (15%) had some education beyond high school and 13 (5%) had completed college. Eleven women (5%) did not provide information.

Most of the women (159 or 66%) reported that they were housewives who did not work outside the home. Sixty-two women (26%) worked full-time outside the home, and 10 (4%) worked part-time. Seven women (3%) did not respond.

Because of the correlation between marital discord and childhood psychopathology, the marital status of each family unit was assessed. One hundred and forty-seven couples (61%) reported that they were living together. In five families (2%), one parent was deceased. Thirteen (5%) reported parental separation in the family, and 16 (7%) reported that the parents were divorced. Thirty-five (15%) of the mothers were remarried, and 10 (4%) of the fathers were remarried. A full breakdown of this data is given in Table II.

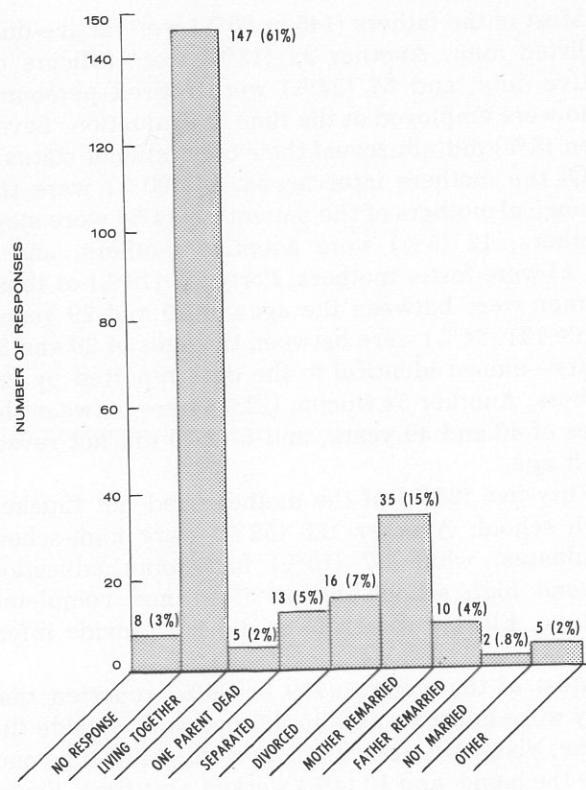
Each parent was asked to identify a problem area involving the child that was of primary concern. Nonspecific pervasive behavioral disorders in all areas were the main problem for 142 (59%) of the families. Eighteen families (7%) reported only academic difficulties, 21 (9%) reported only behavioral difficulties, 25 (10%) reported only difficulties in the home, primarily with regard to discipline, and 5 (2%) reported difficulties in the community but not in the home. Twelve families (5%) reported no difficulties, and 18 families (7%) did not respond.

Of the children referred to the clinic, 208 (86%) were of normal weight at birth: that is, between 5 to

TABLE I. Incidence of Illness in Family

	FATHER OR MOTHER			
	FULL SIBLING	GRANDPARENTS	NO RESPONSE / NONE	
EPILEPSY	3	4	2	0
MENTAL RETARDATION	1	3	0	0
ALCOHOLISM	7	0	23	0
PSYCHIATRIC HOSPITAL ADMISSION	20	1	11	0
SUICIDE	6	0	5	0
OTHER	6	3	5	0

TABLE II. Marital Status of Families (N=241)



10 pounds. Fourteen children (6%) weighed less than 5 pounds, and two children (.8%) more than 10 pounds at birth. There was no response for 17 children (7%). No difficulties at birth were reported for 187 (76%) of the children. Eleven (5%) of the children were jaundiced at birth, and 12 children (5%) had breathing difficulties. No reports were available for 31 children (13%).

Eighty-three (34%) of the families reported no previous psychiatric evaluation or intervention on behalf of the child-patient, while 53 (22%) reported that at least one of the parents had had previous psychiatric care, and 39 (16%) reported previous psychiatric evaluation or treatment for the child. Sixty-seven families (28%) did not respond to this question.

We used the standard diagnostic nomenclature of the American Psychiatric Association's *Diagnostic and Statistical Manual* (2). These diagnostic categories, with the number of patients we diagnosed in each group, are listed in Table III. Of the 241 children we saw, 86 (36%) had transient situational disturbances caused by disturbances in their environment. Thirty-five children (15%) demonstrated

TABLE III. Diagnostic Categories of Children Seen In Clinic

Diagnostic Nomenclature	Number/Percent of Children Diagnosed
1. <i>Mental Retardation</i>	18 (8%)
MR - Mild	
MR - Moderate	
MR - Severe	
MR following major psychotic illness	
Possible MR, borderline to mild	
2. <i>Nonpsychotic Organic Brain Syndrome</i>	30 (12%)
Nonpsychotic organic brain syndrome	
Epilepsy	
Seizure phenomenon (diencephalic)	
3. <i>Psychoses Not Attributed To Physical Conditions Listed Previously</i>	7 (3%)
Schizophrenia	
Possible childhood schizophrenia	
Possible borderline psychosis	
4. <i>Neuroses</i>	5 (2%)
Obsessive compulsive neurosis	
Hysterical neurosis, conversion type	
5. <i>Personality Disorders and Certain Other Nonpsychotic Mental Disorders</i>	5 (2%)
Hysterical personality disorder	
Passive aggressive personality	
Fetishism	
Possible sexual orientation disturbance	
6. <i>Psychophysiological Disorders</i>	9 (4%)
Psychophysiological skin disorder	
Psychophysiological musculoskeletal disorder	
Psychophysiological gastrointestinal disorder	
Colitis by history	
Abdominal pain of undetermined etiology	
Hyperventilation syndrome	
7. <i>Special Symptoms</i>	23 (10%)
Enuresis	
Somnambulism	
Encopresis	
Dyslexia	
Pavor nocturnus	
Possible specific learning disorder	
Specific learning disability	
8. <i>Transient Situational Disturbances</i>	86 (36%)
Adjustment reaction of childhood	
Adjustment reaction of adolescence	
School refusal	
9. <i>Behavior Disorders of Childhood and Adolescence</i>	35 (15%)
Hyperkinesis	
Withdrawing reaction of childhood	
Withdrawing reaction of adolescence	
Overanxious reaction of childhood	
Overanxious reaction of adolescence	
Unsocialized aggressive reaction of adolescence	
10. <i>None</i>	23 (10%)
	TOTAL 241

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behavioral disorders of childhood and adolescence, while 30 (12%) were classified as nonpsychotic organic brain syndrome corresponding to the commonly used term "minimal brain dysfunction with hyperactivity."

Most of the target symptoms we observed were hyperkinetic behaviors. These symptoms were classified as *nonpsychotic brain syndrome* if there was historical or neurological evidence of brain dysfunction, and were classified as *hyperkinetic reaction of childhood* if there was no historical or neurological evidence of cerebral damage. This classification is in keeping with the current belief that these symptoms usually cannot be separated into organic or nonorganic etiologies (3).

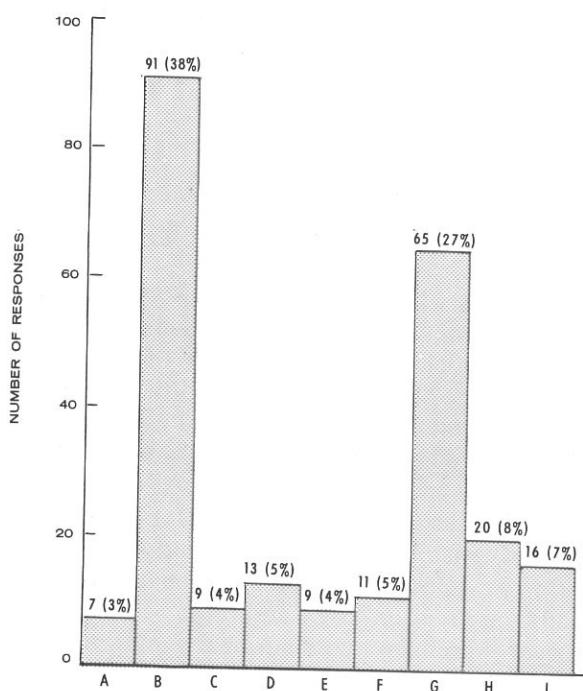
It is difficult to rate objectively improvement or nonimprovement following treatment. Our assessment of results (Table IV) was based on the parents' report that their child's symptoms have improved, on the child's own report of his improvement, or on school reports of improvement in the child's behavior. Of the patients who were available for follow-up, 9 (4%) reported good improvement, 90 (38%) reported some improvement, and 7 (3%) reported no improvement. Nine patients (4%) were hospitalized elsewhere. Sixty-five patients (27%) were seen for evaluation only; no information regarding their improvement was obtained. Another 20 children (8%) were evaluated with immediate crisis intervention; there was no further outpatient treatment. Sixteen (7%) of the children were seen for educational placement only. There were 13 patients (5%) who never appeared for follow-up evaluation, and another 11 (5%) for whom insufficient information was obtained to assess improvement.

DISCUSSION

A common problem encountered in a military child psychiatry clinic is that of frequent transfers of the families being provided care. Parents would sometimes postpone the evaluation until shortly before a transfer or deployment of the father, or they would be suddenly transferred after treatment had begun. It was then difficult to complete a treatment program. In addition, the frequent absence of the fathers because of deployments often made family therapy a sporadic and difficult process.

I believe that there is a definite need for child psychiatric services among the military population, and that such services can be provided within military medical facilities. The data also indicate that

TABLE IV. Assessment of Results



KEY: A—No improvement; B—Some improvement; C—Good improvement; D—Patient never came for follow-up; E—Patient hospitalized; F—Insufficient information to assess follow-up (includes patient running away from home and family transfer); G—Evaluation only; H—Evaluation and crisis intervention; I—Evaluation for educational placement.

patients will voluntarily use these services when they are available and well advertised. Numerous referrals to the clinic can be expected from professional colleagues and community agencies.

In a military clinic, the distribution of diagnostic entities or categories is similar to that usually seen in civilian child psychiatric clinics. The high percentage of families who do not follow through with recommendations or treatment could be due to such reality-oriented circumstances as sudden transfers or deployments. Crisis intervention programs for military families and their dependents are therefore probably most effective when oriented toward short-term goals and treatment.

REFERENCES

1. Personal correspondence from Department of the Navy, Bureau of Medicine and Surgery, Code 3131, 27 March 1975.
2. *Diagnostic and Statistical Manual of Mental Disorders*, 2nd ed., American Psychiatric Association, 1968.
3. Fish B: The "one child, one drug" myth of stimulants in hyperkinesis. *Annual Progress in Child Psychiatry and Child Development*, New York: Brunner/Mazel, 1972.

Foreign Bodies in the Hand: Diagnosis and Treatment

CDR Stephen F. Gunther, MC, USNR

Physicians who provide emergency medical care frequently treat lacerations and puncture wounds of the hand which appear trivial but may harbor retained foreign bodies. On the Hand Surgery Service at the National Naval Medical Center, Bethesda, Maryland, we have treated several patients in whom large foreign bodies were not detected or removed at the time of initial care. Wood splinters, thorns, stiff blades of grass, portions of rubber gloves and other hand wear, glass, and many other materials are not readily apparent on X-ray and must be found during physical examination and surgical exploration of the injury.

CASE REPORT

W.E., a 16-year-old boy, was shooting arrows at an archery range in October 1972 when he sustained a penetrating injury to his left thumb. A large fragment from the side of a defective arrow entered the dorsoulnar aspect of the thumb as the boy released the bow string and the arrow crossed the thumb that supported it. The patient was treated in a hospital emergency room where some loose wood fragments were removed from the small entry laceration. The major fragment was overlooked, and the wound was closed.

When first seen at our hospital four weeks after the injury, the boy complained of mild pain, inability to fully flex the interphalangeal joint of the left thumb, and a prominence under the volar skin crease at the interphalangeal joint. On examination, there was a 5 centimeter subcutaneous induration extending along the ulnar border of the proximal phalanx from the dorsal aspect of the metacarpophalangeal joint to the volar aspect just distal to the interphalangeal joint (Figures 1 and 2). The foreign body could be palpated at the ends of the indurated area. There was no neurovascular injury. The original wound was well healed.

The patient was admitted to the hospital. At surgery, an arrow fragment, 4.5 centimeters long and approximately 7 millimeters in diameter (Figure 3), was removed through an incision under local anesthesia. Some serous fluid surrounded the fragment, but there was no pus. The site was copiously irrigated, inspected, and then closed. The wound healed with no further problem.

From the Hand Surgery Service, Department of Orthopedic Surgery, National Naval Medical Center, Bethesda, Maryland 20014.

DISCUSSION

Besides the interesting mechanism of injury, this case demonstrates several important points in the evaluation and care of foreign bodies in the hand.

1) The *history* should report in detail the mechanism of injury as well as the time lapse between injury and treatment. In this case, the mechanism of injury certainly suggested the possibility of a long wood splinter, yet the whole splinter was left in place at the time of initial treatment and its great size was not anticipated.

A careful history should arouse the physician's suspicion of certain types of foreign bodies; he is far more likely to find an occult foreign body for which he is actively searching, than one whose presence he does not suspect.

In a busy emergency room, it is easy to take an inadequate history. A busy physician, for example, may fail to elicit the history of human bite from a patient who has been fighting but does not volunteer this information. Closure of this sort of wound almost invariably leads to a major hand infection, particularly if particles of contaminated tooth are left in the hand.

2) The *physical examination* must be performed carefully before any anesthesia is given. Joint motion and muscle-tendon function should be completely tested, particularly distal to the wound. Pinprick appreciation and two-point discrimination should be tested throughout the hand, and the palmar and digital arteries should be individually tested, if possible. Palpation may reveal an object not otherwise apparent. In the case presented here, internal splinting by the long wood splinter restricted joint motion distal to the foreign body.

X-rays are an adjunct to examination, as many foreign bodies are radiopaque to some degree.

3) The *surgical exploration* should be performed under adequate operating conditions—good light, appropriate instruments, and an absolutely bloodless field. Failure to obtain a bloodless field is one of

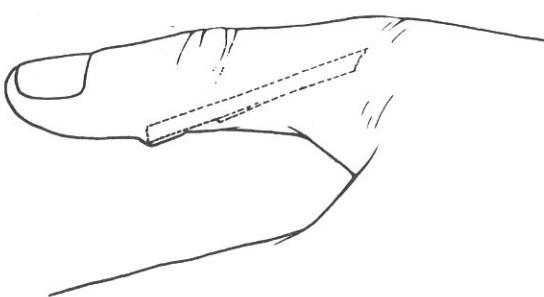


FIGURE 1. A subcutaneous arrow fragment splints the interphalangeal joint of the thumb (see case report).

the most common technical errors leading to inadequate exploration. I prefer a brachial tourniquet, even when using local anesthesia. Patients tolerate a brachial tourniquet for up to 30 minutes without brachial anesthesia, although the last ten minutes are usually uncomfortable. If a regular operating room tourniquet is not available, a routine blood pressure cuff can be inflated, and the two tubes clamped. In finger surgery, a Penrose drain local tourniquet can be placed around the base of the finger. However, I use this technique rarely, only when the brachial tourniquet causes intolerable discomfort.

A tourniquet was not used in the initial treatment of the patient described above; this oversight undoubtedly contributed to the failure to identify the huge foreign body.

Copious saline irrigation will remove tiny particles and debris, and will reveal loose or devitalized tissue that should be debrided. If a bulb syringe does not give a strong enough jet of fluid to clean some areas, better results can be obtained from a 23 gauge needle on a large syringe.

Wound exploration should, of course, be carried out by a qualified person. Many emergency room physicians and surgical house officers are sufficiently familiar with hand anatomy and function to examine and explore the average foreign body injury. It must be remembered, though, that the anatomy of the hand is intricate, and function can be compromised by injudicious surgery, particularly when it is added to injury. The surgeon's abilities must be equal to the greatest possible demands of the injury and its exploration, another reason why careful physical examination is so important. Frequently, it is necessary to enlarge a foreign body's wound of entry by incision; exploration may lead the surgeon deeper into the hand and into a more complicated procedure than he had anticipated.

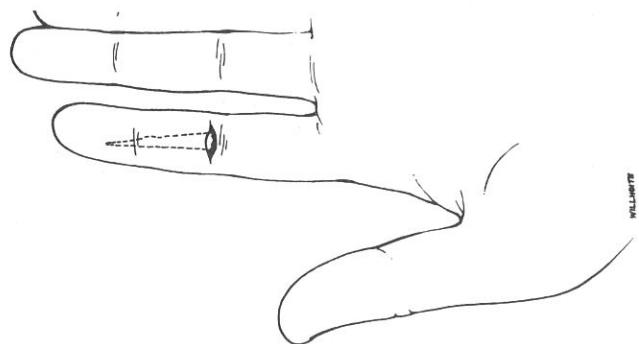


FIGURE 2. In a similar case, an arrow fragment splints the distal interphalangeal joint of the index finger.

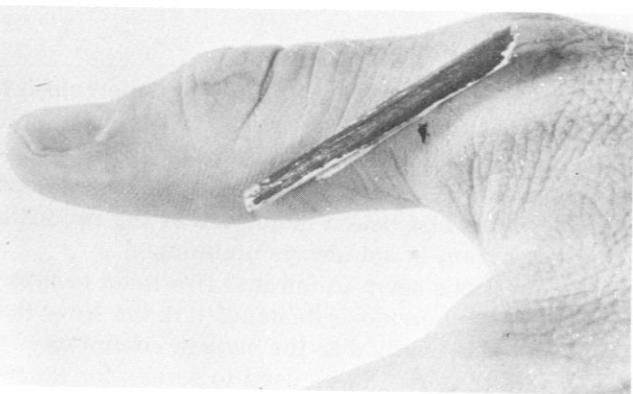


FIGURE 3. In the case reported here, an arrow fragment 4.5 cm long and about 7 mm in diameter was removed through an incision under local anesthesia.

Local anesthesia in the form of digital blocks, local infiltration field blocks, and major nerve blocks at the wrist are sufficient for exploration which can be accomplished within the time limit imposed by the brachial tourniquet. Digital blocks should be administered in the fatty space halfway between the web and the distal palmar crease. Tissue distention and possible vascular compromise are not a problem at this level. The area can easily be reached by introducing the needle through the base of the dorsal web, a less painful procedure than puncture through the palm. Lidocaine is generally used. Epinephrine-containing solutions are never used in the hand.

Median, ulnar, and radial nerve blocks at the wrist are not difficult to do once the physician has had a little practice. Detailed description of these blocks can be found elsewhere (1,2).

REFERENCES

1. Chase RA: *Atlas of Hand Surgery*. Philadelphia: W.B. Saunders Co., 1973, pp. 27-32.
2. Vandam L: *Anesthesia for hand surgery*. In *Hand Surgery*, JE Flynn, ed. Baltimore: Williams and Wilkins Co., 1966, pp. 55-74.

Strategies for Tuberculosis Detection

What do you know about detecting tuberculosis? The tuberculosis control program for the Navy and Marine Corps was revised recently by BUMED Instruction 6224.1D. But comments and questions about the new instruction indicate that the rationale for the program is not always understood.

The questions seem to fall into five main groups:

- Why can't tuberculosis be handled in the Navy the same way it is handled in the civilian community?
- Why are the procedures used to screen for *tuberculous infection* different from those used to detect *tuberculosis disease*?
- Why do we have to use Mantoux tuberculin tests?
- What does it mean when someone has a tuberculin skin test reaction or conversion?
- When are chest X-rays needed?

Unfortunately, actions based on confused or incomplete answers to these critical questions can hinder the control program. This article points out the importance of tuberculosis control in the Navy and Marine Corps today, provides a review of those features of the disease that are pertinent to its detection, and discusses screening procedures for both tuberculous infection and tuberculosis disease.

Tuberculosis has always been a problem of special concern to the Navy. During the long cruises of the past, crews were often ravaged by TB and many deaths resulted. The situation is much improved now, of course, thanks to social change, medical advances, and control programs. But even in the past decade tuberculosis epidemics occurred that were extensive enough to disrupt the operations of some Navy ships.

Tuberculosis is becoming increasingly uncommon in most parts of the U.S. The number of recruits entering naval service with evidence of previous exposure to TB is declining. Reactive tuberculin skin

tests, for example, showed that less than 2% of the entering recruits in 1974 had experienced a tuberculous infection during their 18 or so years of civilian life. It may seem surprising, then, that 1% to 2% of personnel on extended active duty are infected with tubercle bacilli *each year*, a rate much higher than that reported for most of the civilian population. More than 5,000 cases of new tuberculous infections are detected annually in the Navy and Marine Corps alone—individuals who require time-consuming preventive measures and follow-up, and who may develop active TB themselves and infect others.

The 147 cases of active clinical tuberculosis reported among active-duty personnel in 1974 exceeds the total expected from a U.S. civilian population of the same size, age and racial composition. This phenomenon is probably due largely to peculiarities of the naval environment: greater opportunity for exposure to tuberculosis as a result of duty or liberty overseas; close association with shipmates or dependents whose national origin increases the risk of their becoming a source of TB; crowded living conditions that encourage disease transmission, especially aboard ship.

Even the overall infection rate of 1% to 2% is deceptive. For example, 40% of the nearly 2,000 individuals with tuberculous infections detected aboard ship in 1974 were found on just 22 ships. This pattern of small epidemics (microepidemics) demonstrates that tuberculosis transmission can be very intense in a local command, even when the Navy-wide infection rate is low.

Because of the increased opportunities for exposure and the greater potential for spread of the infection, tuberculosis remains a special threat in the Navy and Marine Corps environment. Specific efforts aimed at TB control are still appropriate; but

if they are to be effective, everyone must have a general understanding of the disease and the measures used to combat it.

THE DISEASE PROCESS

The natural history of tuberculosis is very complicated, and a brief consideration necessarily entails great oversimplification. First, while there are several closely related species of bacteria that can cause tuberculosis in man, most cases in the Navy and Marine Corps are due to *Mycobacterium tuberculosis*. Generally a person is first infected when he inhales the bacteria on tiny particles from the cough or sneeze of someone suffering from active tuberculosis. There are other routes by which the bacteria may enter the body, and other organ systems which may be involved, but the "primary" infection is usually in the lungs.

Sometimes, especially among children, the initial infection can quickly spread and produce extensive disease. More commonly the body is able to control the infection by walling off the organisms in small areas of the lungs or associated lymph nodes without the occurrence of recognizable clinical disease. This "dormant" state may last for months, years, even decades. During the quiescent period the body is able to keep the pathogenic bacteria isolated even though they may remain alive and virulent. The immune process which accomplishes this control also causes a reaction when a tuberculin skin test is applied. If a person with a tuberculous infection is examined at this stage, there is usually no evidence of disease; the fact that an infection has taken place is documented only by the reactive tuberculin skin test and possibly some subtle and nonspecific X-ray changes at the involved sites.

A small percentage of infected individuals subsequently lose their ability to control the still-living tubercle bacilli, which escape their confinement and reactivate the pathologic process. This stage of disease, with widespread damage to the lungs and perhaps other organs, is the one most often thought of as "tuberculosis." In addition to the reactive tuberculin skin test, there may be symptoms, X-ray changes, and other signs of active clinical disease. Virulent tubercle bacilli may now be shed in the patient's respiratory discharges, and he may infect others, thus completing the cycle of TB transmission.

With this background, we can consider the rationale behind the selection and use of various TB screening procedures. The Navy's detection strategy

can be easily summarized: since a person cannot have tuberculosis disease without first being infected, we screen everyone initially with tuberculin skin tests to detect *infection*; then we screen those who have been infected, using chest X-rays to detect the development of active *disease*.

TUBERCULIN TESTING METHODS

The tuberculin skin test can be used easily and rapidly to identify almost everyone infected with *M. tuberculosis*. The specific testing technique used in the Navy and Marine Corps is called the Mantoux method, whereby purified protein derivative (PPD) of tuberculin is injected intradermally (into, not under, the skin) by syringe and needle. Although this method is at first more difficult for some people to perform than are multipuncture techniques such as the Tine test, it is more accurate and reliable. As with any test, however, poor technique nullifies these advantages.

When the Mantoux test is given, the size of the resulting area of hard swelling, or induration, depends on the individual's sensitivity to tuberculin and is therefore an indicator of previous exposure to *M. tuberculosis* and related organisms. Most active-duty personnel will have no reaction at all (0 millimeters of induration); this usually means they have never had a tuberculous infection. Among the personnel who do have a reaction will be those actually infected with *M. tuberculosis* and others who were previously infected with one of the closely related *Mycobacterium* species that generally do not produce recognizable human disease. After a careful study of Navy and Marine Corps recruits, it was found that a reaction size of 10 millimeters of induration was the best dividing point for distinguishing these two groups. Individuals who display tuberculin skin test reactions with induration 10 millimeters or more in diameter are defined in the Navy as "reactors," and it is assumed that they have been infected by *M. tuberculosis*. Personnel responding with induration less than 10 millimeters in diameter are called "nonreactors."

A special class of reactors are "convertors"—individuals who change from nonreactors into reactors during a known period of time, usually from one year to the next. They receive special attention because a tuberculous infection is most likely to reactivate and lead to progressing clinical disease in the first few years after the infection is acquired.

One of the most confusing aspects of the definition of convertor, however, is the rule that when the size

of the reaction goes from less than 10 millimeters to the 10 millimeters or more required for "conversion," the increase in diameter must be at least 6 millimeters. This rule compensates for the margin of error of the test. For example, a person could have a reaction of 8 millimeters one year, 12 millimeters the next, and 8 millimeters again the year following—all without any actual change in his immunological status. The major source of such error in the past was variation in the dosage of tuberculin actually administered. This was caused, in turn, by the adsorption of the tuberculin onto the sides of the vials and syringes. The problem has been largely corrected by the use of Tween-80 stabilized PPD, but might still be a factor if the testing material is transferred from bottle to bottle or left in the syringe for any appreciable length of time.

CHEST X-RAY PROCEDURES

While the tuberculin skin test is the most sensitive and reliable detector of infection, it rarely provides an indication that such an infection has been reactivated and so is not an appropriate tool to screen for disease. The best and most efficient single procedure to detect the development of active disease is the chest X-ray. In the Navy, a standard 14" x 17" PA chest X-ray is adequate for routine use, although special views may be indicated in some cases. It should be emphasized, however, that neither a reactive skin test, nor symptoms, nor even an abnormal chest X-ray can alone establish the diagnosis of tuberculosis. This diagnosis must be the result of a thorough medical evaluation. On the other hand, a tuberculous infection can reactivate and produce clinical disease surprisingly rapidly, so some cases will inevitably be discovered when the patient comes to sick call with symptomatic (and infectious) active tuberculosis.

Tuberculosis control is important to you. Tuberculosis is not a has-been disease in the Navy and Marine Corps. A substantial number of cases of clinical TB are discovered annually at fleet and shore units around the world, and each year many more active-duty personnel acquire new tuberculous infections.

Unlike many health problems, TB can be prevented if Medical Department personnel directly and indirectly involved in tuberculosis detection carry out their assigned responsibilities effectively. This can best be done with a thorough understanding of the Navy's tuberculosis control program.—BUMED Code 55.

Notes & Announcements

PERSONNEL OFFICERS' CONFERENCE HELD

Selected personnel officers met at BUMED in March to discuss military and civilian manpower programs and requirements, staffing standards, and SHORSTAMPS. Opening remarks were delivered by Navy Surgeon General VADM D.L. Custis (MC), and RADM E.J. Rupnik (MC), Assistant Chief for Human Resources and Professional Operations. During the conference, CAPT A.J. Schwab (MSC) discussed problems affecting the Medical Service Corps and health care administration. Speakers from the Bureau of Naval Personnel, Naval Health Sciences Education and Training Command, and Enlisted Personnel Machine Accounting Center, New Orleans also participated.

ATLAS OF RADIATION HISTOPATHOLOGY

The fundamentals of radiation histopathology are now available in one complete text, "The Atlas of Radiation Histopathology." Written by Dr. David C. White, registrar of radiation histopathology at the Armed Forces Institute of Pathology in Washington, D.C., the atlas is well illustrated with photomicrographs and drawings that show acute, subacute, and late radiation damage in exposed tissue after radiotherapy for malignant disease.

This atlas is available from the National Technical Information Service, US Department of Commerce, Springfield, Virginia, 22161. Refer to stock number TID 26676. The atlas sells for \$7.60 per copy (foreign rate, \$10.10).

LIMITS SET ON SELL-BACK LEAVE

Under provisions of the FY76 DOD Appropriations Act effective 9 February, military personnel may receive payment for no more than 60 days of unused accrued leave per military career. Leave sold back prior to 10 February, however, does not count toward the 60-day total.

At the end of an enlistment, individuals may either sell back their unused leave or carry it over into their next reenlistment. Under current law, no combination of sell-back and carry-over is possible.

FLEET MEDICAL/DENTAL LIAISON OFFICES

BUMED Notice 6000 of 12 March 1975 requires all naval hospitals and regional medical and dental centers to establish a fleet liaison office to support personnel assigned to

operational billets. A directory for the Pacific Fleet appeared in *U.S. Navy Medicine* in November 1975. Below is a directory of offices in the Atlantic Fleet.

ATLANTIC FLEET MEDICAL/DENTAL LIAISON OFFICE DIRECTORY

<i>NAV HOSP BEAUFORT, S.C.</i>		<i>Commercial Telephone</i>	<i>Autovon</i>
<i>Medical Liaison Office</i>			
CAPT W.R. Mullins, MC, USN		(803) 524-2151 X225	832-2794
LT J.R. Hetrick, MSC, USN		(803) 524-2151 X325	832-2794
HMCM C.R. Stamper, USN		(803) 524-2151 X214	832-2794
<i>NATIONAL NAVAL MEDICAL CENTER</i>			
<i>BETHESDA, MD</i>			
<i>Medical Liaison Office</i>			
CAPT C.S. Lambdin, MC, USN		(202) 295-1274/0237	295-1274/0237
HMCS J.R. Wilson, USN		(202) 295-1274/0237	295-1274/0237
<i>Dental Liaison Office</i>			
CAPT R.D. Baker, DC, USN		(202) 295-1274/0237	295-1274/0237
DT2 W.D. Petyak, USN		(202) 295-1274/0237	295-1274/0237
<i>NRMC CAMP LEJEUNE, N.C.</i>			
<i>Medical Liaison Office</i>			
CAPT V.L. Stotka, MC, USN		(919) 451-4350/4479	484-4350/4479
LCDR K.L. Postel, MSC, USN		(919) 451-4350/4479	484-4350/4479
HMCM R.D. Lassiter, USN		(919) 451-4350/4479	484-4350/4479
<i>Dental Liaison Office</i>			
CAPT J.D. Cagle, DC, USN		(919) 451-4350/4479	484-4350/4479
DT1 R.J. Benbrook, USN		(919) 451-4350/4479	484-4350/4479
(After regular working hours ask for administrative watch officer)			
<i>NRDC CAMP LEJEUNE, N.C.</i>			
<i>Dental Liaison Office</i>			
CAPT E.J. Collevecchio, DC, USN		(919) 451-2208	484-2208
LT R.L. Springfield, MSC, USN		(919) 451-2208	484-2208
DT1 G.E. Kurtz, USN		(919) 451-2208	484-2208
After regular working hours:			
(919) 451-1658			
484-1658			
<i>NH CHERRY POINT, N.C.</i>			
<i>Medical Liaison Office</i>			
LT J.M. McCaig, MSC, USN		(919) 466-4149	582-4149
<i>NRMC CHARLESTON, S.C.</i>			
<i>Medical Liaison Office</i>			
CAPT C.H. Lowery, MC, USN		(803) 743-4405	794-4405
LT W.R. Aliff, MSC, USN		(803) 743-2933	794-2933
HMC F.R. Smith, USN		(803) 743-2933	794-2933
After regular working hours:			
(803) 743-5130			
794-5134			
<i>NRMC GREAT LAKES, ILL</i>			
<i>Medical Liaison Office</i>			
CDR J.W. Poundstone, MC, USN		(312) 688-6792	792-6792
CDR N.C. Lachapelle, MSC, USN		(312) 688-6792	792-6792
HMCM T.G. Gardner, USN		(312) 688-6768	792-6768
<i>U.S. NH GUANTANAMO BAY, CUBA</i>			
<i>Medical Liaison Office</i>			
LCDR E.R. Wolarsky, MC, USNR		Base Extension 95575	
LTJG D.H. McGarvey, MSC, USN		Base Extension 95575	
HMCS M.L. Herz, USN		Base Extension 95575	
<i>NRMC JACKSONVILLE, FLA</i>			
<i>Medical Liaison Office</i>			
CAPT R.F. MacPherson, MC, USN		(904) 246-5301	942-5301
ENS J.O. Taylor, MSC, USN		(904) 772-2197/2198	942-2197/2198
HMCM W.B. Sanders, USN		(904) 246-5303	
<i>NH KEY WEST, FLA</i>			
<i>Medical Liaison Office</i>			
CDR L.W. Setzer, MC, USN		(305) 296-3561 X2335	894-3561
LT D.E. White, MSC, USN		(305) 296-3561 X2335	894-3561
HMCS J.A. Armstrong, USN		(305) 296-3561 X2335	894-3561

NRDC NORFOLK, VA	Commercial	Autovon
<i>Dental Liaison Office</i>	<i>Telephone</i>	
CAPT H. Muller, DC, USN	(804) 464-8107	680-8107
LT O.J. Santore, MSC, USN	(804) 444-7192	690-7192
DTC J.B. Wall, USN	(804) 444-3354	690-3354
U.S. NRMC NAPLES, ITALY		
<i>Medical Liaison Office</i>		
CDR R.S. Gold, MC, USN	760-5400 X4239/4252	625-1110
LT P.L. Mahin, MSC, USN	760-5400 X4214/4228	625-1110
HMC D.L. Templin, USN	760-5400 X4228/4226	625-1110
NRMC NEWPORT, RI		
<i>Medical Liaison Office</i>		
LCDR S. Mills, MC, USN	(401) 841-3771	948-3771
LT E. Peterman, MSC, USN	(401) 841-3771	948-3771
LCDR J. Joyce, NC, USN	(401) 841-3771	948-3771
HMC L. James, USN	(401) 841-3771	948-3771
<i>Dental Liaison Office</i>		
CDR L. Bowen, DC, USN	(401) 841-3771	948-3771
NRMC ORLANDO, FLA		
<i>Medical Liaison Office</i>		
CDR J.P. Smyth, MC, USN	(305) 646-4311/4312	791-4311/4312
LTJG G.E. Parish, MSC, USN	(305) 646-4311/4312	791-4311/4312
HMCS J.B. Ball, USN	(305) 646-4311/4312	791-4311/4312
<i>Dental Liaison Office</i>		
CAPT J.H. Charles, DC, USN	(305) 646-4311/4312	791-4311/4312
DTC J.J. Murray, USN	(305) 646-4311/4312	791-4311/4312
NRMC PHILADELPHIA, PA		
<i>Medical Liaison Office</i>		
CAPT F.X. Ferrell, MC, USN	(215) 755-8319	443-8319
LTJG T.S. Stegbauer, MSC, USN	(215) 755-8266	443-8339
HMCM C.V. Combs, Jr., USN	(215) 755-8266	443-8266
NRMC PORTSMOUTH, VA		
<i>Medical Liaison Office</i>		
CAPT D.C. Good, MC, USN	(804) 397-6541 X566	
LCDR K.L. Owens, MSC, USN	(804) 397-6541 X431	
HMCM D.E. Mason, USN	(804) 397-6541 X261	
<i>Dental Liaison Office</i>		
CAPT T.E. Stump, DC, USN	(804) 397-6541 X884	
DTC J.H. Cooper, USN	(804) 397-6541 X385	
NAVAL REGIONAL MEDICAL CLINIC PORTSMOUTH, NH		
<i>Medical Liaison Office</i>		
LT G.L. Helinek, MC, USN	(207) 439-2380	684-2380
LCDR K.S. Snow, Jr., MSC, USN	(207) 439-2380	684-2380
HM1 G.P. Codley, USN	(207) 439-2380	684-2380
HM1 J.C. Mortensen, USN (Preventive Medicine)	(202) 439-2702	684-2702
NAVAL AEROSPACE MEDICAL CENTER PENSACOLA, FLA		
<i>Medical Liaison Office</i>		
CAPT R.E. Mammen, MC, USN	(904) 452-4256	922-4256
CDR W.I. Casler, MSC, USN	(904) 452-4258	922-4258
HMC D. White, USN	(904) 452-2262	922-2262
<i>Dental Liaison Office</i>		
CAPT W.L. Voyles, DC, USN	(904) 452-4330	922-4330
DTCS R.L. Shealy, USN	(904) 452-4330	922-4330
U.S. NH ROOSEVELT ROADS, PR		
<i>Medical Liaison Office</i>		
CAPT W.J. Wagner, MC, USN	863-2000 Ext. 71 X303/304	434-1710
LT R.W. Baker, MSC, USN	863-2000 Ext. 71 X230/231	434-1710
HM1 W.S. Smith, Jr., USN	863-2000 Ext. 71 X269/270	434-1710
Hospital Officer of the Day	863-2000 Ext. 71 X326	434-1710
U.S. NH ROTA, SPAIN		
<i>Medical Liaison Office</i>		
CDR J.F. Clymer, MC, USN	Base Extension 2369	727-2369
LCDR C.H. Hartman, MSC, USN	Base Extension 2139	727-2139
HMC C. Goff, USN	Base Extension 2369	727-2369
Patient Affairs Office	Base Extension 2139/2302	727-2139/2302

MEDICINE AND RELIGION SEMINAR SET FOR MAY

The seventh annual symposium on medicine and religion will be held Thursday, 6 May 1976, at NRMC Portsmouth, Virginia. Featured speaker is Lowell H. Mays, Ph.D., director of the Department of Human Ecology at Madison General Hospital. A faculty member of the Department of Medicine, University of Wisconsin Center for Health Sciences, and an American Lutheran Church clergyman, Dr. Mays will discuss "Suffering and Pain: Modern Challenges to Medicine, Health Care, and Theology."

The seminar is sponsored by the medical center's Pastoral Care Service. Clergymen, physicians, and other interested health care personnel are encouraged to attend. For further information and registration forms, write: CDR J.C. Rittenhouse, CHC, USN, Naval Regional Medical Center, Portsmouth, Virginia 23708.

SHIPBOARD PESTICIDE FIRES

If a pesticide fire occurs aboard ship, the affected areas should be isolated until cleanup is finished. If a chemical pesticide is involved, use sawdust, absorbent clays, or lime to absorb the remaining solution. If the fire breaks out on a weather deck, most of the chemical solution will wash over the side; further dilution with water and a soap-and-water scrubdown will complete decontamination.

Inhalation of pesticides during a fire can be avoided by using self-contained breathing apparatus, the standard operating procedure when entering a contaminated storage space. However, pesticides can also be absorbed through the skin—far more rapidly and completely than was once thought. The clothing of shipboard firefighters gives little protection. Firefighters should wash thoroughly with soap and water, and change their clothes.

The emergency medical treatment chart published in *U.S. Navy Medicine*, November 1975, is a good source of information on the symptoms and treatment of pesticide poisoning.

DENTAL OFFICERS TRAINED IN CASUALTY TREATMENT

Twenty Navy dental officers have completed a Casualty Treatment Training Course held 19-23 January 1976 at Naval Regional Dental Center Norfolk, Virginia. In the course, dental officers learn

emergency casualty treatment so they can augment the medical effort during emergencies. Similar courses are held at Great Lakes, Illinois, and San Diego, California.

Course graduates included USN dental officers CAPT R.M. Hoffman, CAPT J.P. Williams, CDR G.L. Pault, CDR D.D. Viles, CDR C.R. Cowen, LCDR R.B. Finger, LCDR M.L. Davis, LCDR D.P. Golden, LT W.R. Start, and LCDR M.A. Cochran. USNR dental officers who completed training were: LT C.D. Herscher, LT S.W. Winkleman, LT A.D. McCorkle, LT P.A. Homoly, LT W.J. Boyd, LT R.P. Blank, LT G.A. Rounsville, LT F.J. Murray, and LT P.E. Schmid. CAPT V.C. Lawrence, Jr., DC, USNR-R, also finished the course.

NATIONAL LIBRARY OF MEDICINE HAS NEW ON-LINE DATA BASES

The National Library of Medicine (NLM) recently announced several new data bases for NLM's on-line network:

- AVLINE contains information on 700 audiovisual instruction materials in the health sciences. Reviewers classify the material as "highly recommended" or "recommended." AVLINE is expected to increase by about 200 accessions per month. Originally accessible only in a test mode, it is now available to all MEDLINE users in the United States.
- CANCERPROJ, a National Cancer Institute data base, has summaries of ongoing cancer research projects and protocols or clinical trials. The Smithsonian Science Information Exchange collects the research projects from foreign and domestic sources; grants, contracts and fellowships are included. A user can retrieve information on a project or protocol from CANCERPROJ by specifying any of the following information: type of award, performing organization, fiscal year, supporting agency identification number, county or state, an investigator's name, or words which appear in the title or summary. Project summaries accompany all citations in the data base. The file is available to both MEDLINE and TOXLINE users.
- EPILEPSY has bibliographic citations (including abstracts) to articles on epilepsy abstracted by *Excerpta Medica*. The file, sponsored by the National Institute of Neurological and Communicative Disorders and Stroke, contains over 16,000 records from 1945 to 1973; NLM plans to add later citations. It is available to MEDLINE and TOXLINE users.

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THIRD CLASS MAIL

THE GROOM WORE WHITE

The nicest things happen in Navy hospitals. Patients not only get well there, they sometimes get married.

So when retired Petty Officer Richard Taylor took a spill off his motorcycle and wound up on the orthopedic ward of the Naval Aerospace and Regional Medical Center, Pensacola, he saw no reason to cancel his wedding plans. Bride Carol Bates and the wedding party gathered at his bedside on 4 February where, with Rev. Terry Vaughn officiating, the couple exchanged marriage vows.

Happiness—and good health—to the resourceful pair.



U.S. NAVY MEDICINE